THE STORY OF LANGUAGE

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OF LANGUAGE

By Mario Pei

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THE STORY OF LANGUAGE

THE HISTORY OF LANGUAGE

Non-Linguistic Systems of Communication

*"There was speech in their dumbness, language in their very ges-
ture."*—Shakespeare, *The Winter's Tale*

You are travelling along a motor highway. At the side of the road
there appears an octagonal sign-post, with no lettering on it. If you
do not know the code, you will go right on past it, into the arms of a
traffic policeman or, more tragically, into a crash. If you know the
code, you will come to a full stop. In like manner, a round disk with
a cross tells you you are approaching a railroad crossing, a diamond-
shaped sign tells you to slow down, a square sign indicates that you are
entering a school-zone. Most States have now replaced these symbolic
sign-posts with lettered signs, because illiteracy is rapidly diminishing.
They depended upon a visual symbolism of shape, and served their
purpose well when a segment of the driving population was still il-
literate or semi-literate.

The red, green and yellow lights and "blinkers" which are now so
common are equally effective, save in cases of color-blindness. They
depend upon a visual symbolism of color, in which red arbitrarily
stands for "stop" or "danger," green for "safety" or "go," yellow for
"slow" or a transitional signal, a blinking light for "caution."

You are trying to pass a truck on a narrow highway at night. In
response to the tooting of your horn, the truckman flashes his rear
outline-lights off and on. If you know the code, you know that you
can pass him safely. But if instead of signalling with his lights he
waves his arm up and down, you know there is a car coming in the

opposite direction, and drop behind till he gives the welcome flash. Here we have a symbolism of light and one of gesture.

In none of the cases outlined above has there been an interchange of language, spoken or written. There has, however, been an interchange of meaning, a transfer of significant concepts. If we accept only the narrower etymological definition of "language" as that which is produced by the human vocal organs and received by the hearing apparatus, we shall have to deny the name of "language" to these transfers. If we accept the broader definition of language as any transfer of meaning, they are forms of language differing in degree but not in kind from a spoken or written message.

In their anxiety to restrict language to a pattern of sounds, too many linguists have forgotten that the sound-symbols of the spoken tongue are neither more nor less symbolical of human thought and human meaning than the various forms of activity (gestural, pictorial, ideographic, even artistic) by which men have conveyed significant messages to one another since the dawn of history. It is a commonplace among linguists that the spoken language antedates the written language by thousands, perhaps millions of years. Insofar as the written language is a symbolical replica of the spoken tongue, this is undoubtedly true. But there is little or no assurance that organized sound-language, as distinguished from mere animal cries, antedates pictographs painted on the walls of caves or petroglyphs carved on rocks, whose purpose undoubtedly was to convey a significant message or establish a permanent record.

Some scientists claim that certain animal species communicate by non-linguistic devices; that bees, for example, convey significant messages to one another by odor and by dancing in their hives, or that ants use their antennae in a significant way. The evidence for this seems to be about as conclusive (or inconclusive) as that in favor of animals with vocal organs communicating significantly by means of a "language" of barks, yowls and whines.

Meaning may be transferred by devices that have nothing to do either with the spoken language or with its written counterpart, and this basic proposition few will be so hardy as to deny. A logical corollary is that language as we know it did not necessarily have to become the great thought-conveyor that it is. Granted a different

historical development, it is conceivable that the human race might have reserved its oral passages for purposes of eating and breathing only, and developed an entirely different machinery for the transfer of meaning. That this might have been so is proved by the truly vast number of auxiliary meaning-conveyors that the human race has actually devised, and employs side by side with the spoken and written language. Our justification for discussing them here lies partly in the fact that they *are* auxiliaries to language, partly in our partiality for the broader definition of language as that which serves to convey meaning, partly in the fact that a historical discussion of language would be incomplete without them.

In the written language, as will be seen in a subsequent chapter, there are two possibilities: the written language may follow the spoken language, symbolizing its sounds, or at least its words; or it may avoid any connection whatsoever with the spoken language, and symbolize thoughts, ideas and objects. In the former eventuality, the written language is, of course, a handmaiden to the spoken tongue; in the latter, it is altogether free of spoken-language restrictions. In either case, it resembles the spoken tongue in that it depends upon symbols which require common acceptance. The same is true of any non-linguistic system of communication. There must be common agreement upon a symbol before the latter can become meaningful, serve the purposes of transfer, and be dignified, even figuratively, with the name of "language."

The systems of communication that have been devised by man's fertile brain since the inception of civilization are numerous, not to say innumerable. An interesting question that arises in connection with them is whether and to what extent the mutual acceptance that characterizes them is based on a previous understanding depending upon spoken language. The story of the fall of Troy, for instance, tells us that the news of the final victory was relayed from Asia Minor to Greece by a series of signal fires. Signal fires have been in use ever since, and are believed to have led to the use of the heliograph, whereby the sun's rays are reflected from a mirror at significant intervals. But was not the meaning of the signal fires of Troy previously agreed upon through the agency of the spoken tongue?

The same question arises in connection with the tomtom used by

African natives as a long-distance telephone. Its significantly spaced beats antedate the Morse code by several centuries and, unlike the latter, are not based upon the spoken languages of their users. We have, however, no assurance that they were not originally arranged at a series of spoken-language conferences. The same may be said of the smoke signals of the American Indians. If it could be proved that all non-linguistic systems of communication were originally systematized through the spoken-language medium, the historical priority of the spoken language would be established. While this proof is readily forthcoming in the case of many systems, it is lacking in others, notably in the field of gestural language.

Certain non-linguistic forms of communication come close to the spoken, others to the written language. The "uh-huh" uttered in three distinct tones, and without accompanying gestures or nods, to signify "yes," "no" and "maybe" in some sections of the South is so close to spoken language that one is left in doubt whether it should be mentioned in this chapter. Very close to the spoken language is also the whistling language used by the natives of Gomera, in the Canary Islands, who communicate by means of it over very long distances (some say six miles); it seems established, however, that this whistling language is based on Spanish rhythms and pitch. Greater doubt attaches to the American wolf whistle and its Italian equivalent, a clucking sound made with the tongue. Symbols of this sort, however, serve to express only one basic emotion, and are therefore to some extent disqualified for the status of language, which must express a variety of things. On the other hand, they share one important characteristic of language; they are based on mutual agreement, and become quite meaningless if the requisite general acceptance is not there. American Wacs were quite bewildered by Italian clucks, and Italian girls by American wolf whistles, until the meaning was explained. In like manner, the American hiss in token of disapproval and loud whistling in sign of enthusiastic applause are quite misunderstood in many European countries, where violent disapproval is expressed by whistling and the hiss is never heard. In Japan a variant of the hiss, a loud sucking-in of the breath, betokens polite recognition. International difficulties arising out of a language of non-linguistic symbols are apparently almost as great as those originating from spoken tongues.

Other varieties of non-linguistic forms of communications come close to the written language, and are supposed by some to have given rise to it. Under this heading fall firstly the pictographic drawings of primitive groups concerning whose ability to speak there is some doubt; secondly the knotted ropes and notched sticks of the ancient Chinese, the South American Indians and the West African and Australian natives. For the first, the question of priority in time appears insoluble. Did the Cro-Magnons and other still more primitive men who developed a very effective rudimentary form of pictorial art, whereby they left significant messages and records, possess speech? Or are their efforts indicative of an abortive tendency to communicate by means of pictures before connected language began? For the second, the problem that poses itself is to what extent the mutual understanding of the symbols in question rested upon a previous linguistic understanding. All we can say with definite assurance is that the meanings conveyed by the ropes and sticks are independent of the spoken languages of their users, and of such a nature as to afford the possibility of international use among speakers of different languages. The *quipu,* or "knots," used by the Peruvian Incas, for instance, included red ropes to symbolize soldiers, yellow ropes for gold, white ropes for silver, green ropes for grain, with a single knot signifying 10, two knots 20, a double knot 100, and so forth. The messages conveyed by means of the *quipu* were so complicated that special officials called *quipuca-mayocuna,* or "keepers of the knots," were ordained to interpret them.

A third great division of non-linguistic communication is gestures, which have no connection, save in a few specific instances, with either the spoken or the written language. Here the problem is more complicated. Granted that many conventional modern gestural signals, like those of a baseball umpire, football coach, boxing referee or traffic policeman are based upon previous linguistic understanding, the fact nevertheless remains that gestural language is commonly conceded to have preceded oral speech, some say by at least one million years. It is further estimated that some seven hundred thousand distinct elementary gestures can be produced by facial expressions, postures, movements of the arms, wrists, fingers, etc., and their combinations. This imposing array of gestural symbols would be quite sufficient to provide the equivalent of a full-blown modern language. It is quite conceivable:

first, that a gestural system of communication could have arisen prior to and independently of spoken language; second, that such a system, had historical conditions been favorable, might have altogether supplanted the spoken tongue; third, that it could today supply the world's needs for an international common system.

The third part of this proposition requires no proof. Many North American Indian tribes are known to have developed a system of sign-language whereby members of different groups, speaking dissimilar languages, could carry on lengthy conversations about any topic (the northern tribes generally used two hands, the southern tribes one). The International Boy Scout movement, with a courage based on ideological conviction, resolutely adopted the Indian sign-language and proceeded to develop a science of pasimology, or gestures, which serves the Jamborees in perfect fashion. Representatives of as many as thirty-seven different nations have met at various times and carried on both general business and private conversations in pasimology.

The gesture-language idea was carried on by teachers interested in the training of deaf-mutes. Here, however, we have a secondary ramification. Some deaf-mute language systems express gesturally and by means of facial expressions only ideas and states of mind, in which case they can be internationally used. Others spell out words, which means that a particular language is called into play, whereupon the gestural system becomes a mere auxiliary of the spoken tongue. Still other systems combine both approaches. A fourth approach is that of lip-reading and the consequent reproduction of audible speech by the "deaf oralists," but this, of course, is merely a phase of the spoken language.

It is interesting that the American Indians should have contributed to the world's civilization their own particular form of pasimology, used for the avowed purpose of avoiding international language difficulties. Their systematic reduction of meaning to gestures, however, has less developed counterparts in other portions of the world. It has been noted by students of pasimology that many gestural forms are universal. For example, the gestures describing a beard, a headdress and a cupped hand raised to the mouth denote respectively a man, a woman and water in Armenia, Russia, among the Australian Bushmen, and among the deaf, while American Indian signs for "child,"

"man," "no," "tear" and "night" have been traced in Egyptian, Chinese and Mayan symbols on monuments, representing the same ideas. Both ancient Egyptian and ancient Chinese monuments represent "no" by a pair of outstretched arms or hands.

Gesticulation used as an aid to the spoken language is universal, but to different degrees and with different symbolisms. Southern Europeans use many more gestures than the inhabitants of northern Europe. When French fliers were being trained in this country, gesticulation was systematically used and found extremely helpful in teaching them English.

Differences in gestural symbolism are often striking. To the ancient Greeks, a downward nod of the head meant "yes," an upward nod "no." The modern Neapolitans express "no" by an upward jerk of the head, coupled with the sticking out of the lower lip. Americans usually wave good-bye with the palm of the hand down, but many Europeans give the same wave with the palm of the hand up and the fingers moving back and forth, which gives their signal a "come hither" look. An Italian downward motion of the forearm, with the extended fingers sweeping down past the chin, which they barely touch, means, "Nothing doing!," while a wave of the forearm, with the fingers and thumb cupped close together and coming to a point, means, "what is at all about?"

Among ancient gestures that have given rise to language clichés is the *pollice verso* ("thumbs down," in our parlance, but the thumb was actually turned up) of the ancient Romans, which meant death to the gladiator who had been overcome. The Romans' expression for "to applaud" was *pollicem premere* ("to press the thumb"), but actually they displayed their approval by clapping, snapping their fingers, and waving the flaps of their togas.

A few special gestures have interesting historical origins. Our military salute goes back to medieval times, when knights raised the visors of their helmets on meeting so they could recognize one another. The Fascist salute, with extended arm and outstretched hand, goes back to the days of ancient Rome; its significance was in origin a peaceful one, indicating that there was no concealed weapon, and the American Indians used a very similar greeting. The clenched fist of the Communists arose in opposition to the Fascist salute.

Gesticulation used for a specific, even professional purpose, is an ancient phenomenon. In the traditional dancing language of Japan, China, Korea, Indo-China and the Dutch East Indies there is a series of conventionalized gestures which serve to convey both the narrative and the emotional states that are to be symbolized. Among the latter, there are said to be some two hundred symbols to express various phases of love. The flirt-language of the fan, widely used by lovers in past centuries, conveyed very complicated messages. Somewhat similar was the sign-language used for a time by modern bobby-soxers, in which bobby sox straight up meant "open for date," one fold meant "going steady," rolled down had the meaning of "taken," beads knotted on the neck meant "dated," unfurled, "open for date."

Recently gestural language has been commercialized in interesting fashion. The ushers in New York theaters use a series of conventionalized gestures whereby they signal to one another. A raised fist indicates that no more patrons are to be admitted; right fist on hip and two fingers of the left hand touching the elbow indicate two doubles half way down; right arm held out from the waist with left hand pointing to shoulder, elbow or wrist indicate single seat in rear, center or front; crossed arms indicate all seats filled in an aisle. Over forty such signals are in use.

The casino croupiers of Monte Carlo also have developed a complete system of sign-language. Finger-tips touching the table mean, "There's a chiseler here"; a finger behind the ear is a distress call for the head man; the finger of one hand touching the thumb of the other means, "O. K.; let him play"; crossed index and third finger is "please take over"; palm and fingers extended downward means, "They are cleaned out."

In all these modern phases of gesturing, however, previous understanding achieved by linguistic means is implicit. The same may be said of scientific and semi-scientific systems of communication such as semaphores, flags, cable codes and the universal weather-reporting code, intelligible in all parts of the world, recently devised by the Meteorological Division of International Civilian Aviation, and based upon the use of groups of five figures.

To the question why did gestural language not become generalized in the place of spoken language, a fairly satisfactory, though somewhat

mechanistic answer was given by Darwin. Gestural language requires use of the hands, while the spoken language leaves the hands free for other tasks; gestural language requires light and unobstructed view, while the spoken language can operate in the dark and around obstacles. On the other hand, the international advantages of gestural language are more apparent than real, since spoken language could, if desired, be made equally international, while gestural language, as has been seen, is not necessarily international in scope. Even the greater expressiveness and emotional release of gestural language is largely hypothetical, in view of what can be and is achieved along these lines by the spoken tongues.

In sum, systems of communication not based on speech, while extremely useful on specific occasions, are generally inferior to the spoken tongue as meaning-conveyors. The one great exception to this general statement is writing, which by sublimating and multiplying symbolical values has succeeded in implanting itself by the side of the spoken tongue, of which it is a substitute and an auxiliary, to the point where some prefer it and consider it an instrument of transfer superior to its oral counterpart.

THEORIES OF LANGUAGE BEGINNING

God, that all-powerful Creator of nature and architect of the world, has impressed man with no character so proper to distinguish him from other animals, as by the faculty of speech.—Quintilian

Language,—human language,—after all, is but little better than the croak and cackle of fowls, and other utterances of brute nature,—sometimes not so adequate.—Hawthorne

If there is one thing on which all linguists are fully agreed, it is that the problem of the origin of human speech is still unsolved.

Theories have not been wanting. Some are traditional and mystical, like the legends current among many primitive groups that language was a gift from the gods. Even as late as the seventeenth century, a Swedish philologist seriously maintained that in the Garden of Eden God spoke Swedish, Adam Danish, and the serpent French, while at a Turkish linguistic congress held in 1934 it was as seriously argued that Turkish is at the root of all languages, all words being derived from *günes,* the Turkish word for "sun," the first object to strike the human fancy and demand a name.

Other theories may be described as quasi-scientific. One hypothesis, originally sponsored by Darwin, is to the effect that speech was in origin nothing but mouth-pantomime, in which the vocal organs unconsciously attempted to mimic gestures by the hands.

Several theories are current among linguists today, but with the distinct understanding that they are as yet unproved and, in the nature of things, probably unprovable. They have been given picturesque names, which proves that linguists, too, can be imaginative on occasion.

The "bow-wow" theory holds that language arose in imitation of the sounds occurring in nature. A dog barks; his bark sounds like "bow-wow" to a human hearer. Therefore he designates the dog as

"bow-wow." The trouble with this theory is that the same natural noise is, apparently, differently heard by different people. What is "cock-a-doodle-doo" to an Englishman is *cocorico* to a Frenchman and *chicchirichì* to an Italian.

The "ding-dong" theory sustains that there is a mystic correlation between sound and meaning. Like everything mystical, it is best discarded in a serious scientific discussion.

The "pooh-pooh" theory is to the effect that language at first consisted of ejaculations of surprise, fear, pleasure, pain, etc. It is often paired with the "yo-he-ho" theory to the effect that language arose from grunts of physical exertion, and even with the "sing-song" theory, that language arose from primitive inarticulate chants.

The "ta-ta" theory that language comes from imitation of bodily movements is further exemplified in the Darwinian belief described above.

The ancient Greek philosophers, who gave some attention to the problem of the origin of language, allowed themselves to be led afield by their speculative leanings. Pythagoras, Plato, and the Stoics held that language had come into being out of "inherent necessity" or "nature," which is begging the question, while Democritus, Aristotle and the Epicureans believed it had arisen by "convention" or "agreement." How this agreement had been reached by people who had no previous means of mutual understanding they did not trouble to explain.

Leibniz, at the dawn of the eighteenth century, first advanced the theory that all languages come not from a historically recorded source, but from a proto-speech. In some respects he was a precursor of the Italian twentieth-century linguist Trombetti, who boldly asserted that the Biblical account of the Tower of Babel is at least figuratively true, and that all languages have a common origin. A contemporary linguist, E. H. Sturtevant, presents a novel theory which, though slightly paradoxical, has its merits. Since all real intentions and emotions, he says, get themselves involuntarily expressed by gesture, look or sound, voluntary communication, such as language, must have been invented for the purpose of lying or deceiving. People forced to listen to diplomatic jargon and political double-talk will be tempted to agree.

On at least three recorded occasions attempts were made to isolate

children before they began talking to see whether they would evolve a language of their own. One such attempt was made by the Egyptian king Psammetichos, the second by Frederick II of Sicily about 1200, the third by King James IV of Scotland around 1500. These attempts, lacking scientific controls, proved inconclusive. More recent cases of children who had allegedly grown up among wolves, dogs, monkeys or gazelles have added little to our knowledge, save that the human child, though ignorant of human language when found, takes to it readily and with seeming pleasure, something that his animal playmates are incapable of doing.

Animal cries, whether we choose to describe them as "language" or not, are characterized by invariability and monotony. Dogs have been barking, cats meowing, lions roaring, and donkeys braying in the same fashion since time immemorial. The ancient Greek comic poets indicated a sheep's cry by Greek letters having the value of "beh"; in modern Greek, those letters have changed their value to "vee." The sheep's cry has not changed in two thousand years, but the Greek language has.

Human language, in contrast with animal cries, displays infinite variability, both in time and in space. Activity and change may be described as the essence of all living language. Even so-called dead languages partake of this changeability, as evidenced by the ingenious combination devised by the Vatican to express the ultra-modern concept of "motorcycle" in Latin—*birota ignifero latice incita,* ("two-wheeled vehicle driven by fire-bearing juice").

In one sense, the reason for the changeability of language is as mysterious as the origin of language itself. In another sense, it is crystal clear. Language is an expression of human activity, and as human activity is forever changing, language changes with it. It seems at least partly established that language changes least rapidly when its speakers are isolated from other communities, most rapidly when they find themselves, so to speak, at the crossroads of the world. Among the Romance languages, a tongue like Sardinian, comparatively sheltered from the rest of the world, has changed little from the original Latin, while French, exposed to all inroads, invasions and crosscurrents from the rest of Europe, has diverged the most. Arabic, long confined to the relative isolation of the Arabian peninsula, preserves the original Se-

mitic structure far better than Hebrew, located in much-visited Palestine.

Many linguists hold that agricultural and sedentary pursuits tend to give stability to language, war-like and nomadic life to hasten its change. Lithuanian, the tongue of a population of peaceful farmers, has changed little during the last two thousand years, while Scandinavian evolved very rapidly during the Viking era. An influence exerted on language by climate has often been claimed, but never fully substantiated.

Whether much or little, all languages change in due course of time. A modern English speaker encounters some difficulty with the English of Shakespeare, far more with the English of Chaucer, and has to handle the English of King Alfred as a foreign tongue. A French speaker finds the fourteenth-century language of François Villon a little difficult, has considerable trouble with the twelfth-century *Chanson de Roland,* barely recognizes the tongue of the ninth-century Oaths of Strasbourg, and if he goes further back has to handle the documents he finds from the Latin rather than from the French standpoint; yet there was never a break in the continuity of the spoken tongue of France or its speakers.

Two main theories have been advanced concerning the breaking-up of an original tongue into separate languages or dialects, and here again there is evidence of secret imaginative, even poetic leanings on the part of supposedly unemotional linguistic scientists. One is the "tree-stem" theory, whereby the parent language is supposed to act as a tree-trunk, while new languages are branches or offshoots. The other is the "wave" theory, in accordance with which new languages and dialects arise and spread like ripples when you throw a stone into the water.

Two different modes of change in language-sounds are recognized: the change may arise very gradually, almost imperceptibly, and be as gradually and unconsciously adopted by the speakers; or it may arise suddenly, as the result of an innovation made by one speaker who has prestige in the community and is therefore widely imitated.

It is estimated by scientists that some tens of thousands of years elapsed between the beginning of society and art (and, probably, speech) and the first appearance of writing. During these long centuries language continued to evolve, but we unfortunately have no

record of that evolution. Linguistic records properly described as such are almost exclusively in writing. The oldest such records at our disposal are those of Sumerian, a language spoken in the Mesopotamian valley between about 4000 B.C. and 300 B.C., when it became extinct. The affiliations of Sumerian are undetermined, but it seems unrelated to the Semitic Akkadian spoken by the Babylonians and Assyrians, who invaded the Sumerian territory about 3000 B.C.

Sumerian and Akkadian lived side by side for a long period. Almost contemporaneous with Akkadian are written records of ancient Egypt and China, both of which go back to almost 2000 B.C.

After this beginning, language records come thick and fast. Many languages of antiquity have disappeared, leaving few and scanty remains. Etruscan, Cretan, Iberian and Gaulish, to cite a few better-known examples, are among the fallen. Other languages, like those of the North American Indians, are similarly disappearing today. For some dead languages our only records are a few inscriptions on coins or tombstones, or names of people, rivers and mountains that have come down to us, like the Delaware Indian "Manhattan" and the Iroquois "Adirondack," which survive their originators. Hesychius, a Greek lexicographer of the fifth century A.D., cites words from many ancient languages, including Egyptian, Akkadian, Galatian, Lydian, Phrygian, Phoenician, Scythian and Parthian. It is a favorite pastime among comparative linguists to reconstruct extinct languages from a few words or inscriptions, in much the same fashion that paleontologists reconstruct extinct animals from a few fossil bones.

No document of the original parent-language of our western tongues, Indo-European, has ever been found or is likely to be found, since the language probably broke up into separate Indo-European languages before the invention of writing. By a comparison of the known daughter-tongues, however, linguists are able to present a hypothetical but quite plausible facsimile of this unknown tongue.

The oldest languages of our Indo-European family of which we have records are Sanskrit, Greek and Latin, in the order given. The approximate dates for each are 2000, 800 and 500 B.C. The original homeland of the Indo-European speakers is unknown, but the Iranian plateau and the shores of the Baltic are the places most favored. From a study of words common to all the Indo-European languages, it can be

argued that the original Indo-Europeans knew snow, the birch, willow and pine, the horse, bear, hare and wolf, copper and iron. This would place them in the Copper-Stone Age, about 2500 B.C.

The oldest Sanskrit records are the Vedic hymns, a series of religious poems. The Homeric poems, *Iliad* and *Odyssey,* mark the beginning of Greek, while for Latin we have a series of inscriptions, the oldest of which, appearing on a belt-buckle from the city of Praeneste, reads: "Manius made me for Nummerius."

Among all the world's languages, the Latin-Romance group is the one of which we have the most complete unbroken history. Latin records run from 500 B.C. to the end of the Roman Empire and beyond, merging with nascent French in A.D. 842 and with nascent Spanish and Italian in 950 and 960, respectively.

Anglo-Saxon and Old English are synonymous terms. The Anglo-Saxon period lasted until the middle of the twelfth century, when the Middle English period began. Modern English begins about 1400. Approximately the same periods apply to Old, Middle and Modern German. It is perhaps of interest to note that as late as the sixteenth century English, today the tongue of 230 million people, had less than five million speakers, being surpassed in point of numbers by German, French, Spanish and Italian.

Words in our modern languages that can be traced directly back to the pre-Classical tongues of antiquity are relatively few. Our "wine" comes from the Latin *vinum* which Latin seems to have borrowed previously from Etruscan; the word *vinum* appears frequently in Etruscan inscriptions. "Mules" for "house slippers" may go back to Sumerian, which called such slippers *mulus.* Our word "gum" comes from the Greek *ƙommi,* but Greek appears to have borrowed it from ancient Egyptian, where it appears in the form *qmit;* Coptic, Egyptian's closest modern descendant, has *ƙomi.* "Cream" may have originally come from the Gaulish or Aquitanian *ƙrama,* though some authorities ascribe its origin to Greek *chrisma.* The "eena meena mina mo" used in childish games goes back to numerals used by the ancient Welsh tribes, and the Indo-European word which gives rise to our "ten" is said to have been originally a compound of "two" and "hand," while "five" seems connected with "finger."

English "dad" is a word from baby-talk, but the baby-talk must have

started early, since similar forms appear in many Indo-European languages; Gaulish has *tatula,* Gothic has *atta,* Welsh has *tad,* Russian has *otyets,* and some Italian dialects have *tata.*

Animal call-words have a long and interesting history. *Dil,* which was originally a call-word for geese, became in Irish the word for "dear." "Hog," originally a pet name for a pig, which in sections of England is used for pet lambs and bullocks, gave rise in Irish to *og* ("young" or "little"). The use of "puss" or some very similar word or sound (*bis, pss,* etc.) to call a cat is common to the British Isles, Arabia, North Africa, Spain, Brittany, Italy, Scandinavia, Germany and Holland. Such forms as *pusei* in the Tamil of southern India, *pisa* in Rumanian, *piso* in Albanian testify to the widespread use of the form.

What are the chances that modern linguists, equipped with the powerful aids of present-day science, may one day break down the veil of mystery that enshrouds the origin of language? Frankly, very slight. The mightiest searchlight cannot cast a beam on what is not there. When man first began to speak, he left no material records, as he did when he first began to write. Hence, the truly scientific study of the origin of language can properly begin only with the beginning of written-language records.

All that the scientist in the linguistic field can do in connection with the beginning of speech is to observe what is observable around him (the speech of infants, the language of primitive groups, etc.), compare his observations with the earliest records and known historical and anthropological facts, and, basing himself upon those observations and comparisons, make surmises, which will be more or less plausible, more or less complete, but never scientific in the true, full sense of the word.

THE FAMILY RELATIONSHIPS OF LANGUAGE

> *. . . Philologists, who chase*
> *A panting syllable through time and space,*
> *Start it at home, and hunt it in the dark,*
> *To Gaul, to Greece, and into Noah's Ark.*
> —Cowper, *Retirement*

The world's languages have been, in their majority, very imperfectly studied and classified. Far too little is yet known about the structure and affiliations of the tongues of the American Indians, the African Negroes, the natives of Australia and New Guinea, and a large number of the tongues spoken by Asia's teeming millions.

The languages of Europe, the Mediterranean basin and the Near East, being the most readily accessible as well as the ones of which we have the longest unbroken records, have been definitely and satisfactorily assigned to groups and families, on the basis of certain definite resemblances.

It has long been the dream of certain linguists to trace all languages back to a common source. Attempts to do this have so far proved largely fruitless. The variability of language in the course of time is such that in the absence of definite historical records of what a language was like five thousand, one thousand, or even three hundred years ago, classification becomes extremely difficult. If we did not have an unbroken tradition of continuity, it would be somewhat difficult to recognize in the Anglo-Saxon of *Beowulf* the same tongue that is used by the sports writers of modern American dailies.

A fundamental unity, indicating a common ancestry, underlies such diverse tongues as English, Russian, Irish, Spanish, Greek, Albanian, Armenian, Persian and Hindustani. Another, but separate and distinct unity definitely appears for such tongues as Arabic,

Hebrew, the Amharic of Ethiopia, and the ancient tongues of Babylonia, Assyria, Phoenicia and Carthage. Finnish, Hungarian, Turkish, and most of the languages of Asiatic Russia are grouped together in a third unit; but while all linguists admit the kinship of Finnish and Hungarian, some doubt their relationship to Turkish. Other similar groupings cover the tongues of southeastern Asia, including Chinese, Burmese, Thai and Tibetan; the Dravidian languages of southern India; the Malayo-Polynesian tongues of the far-flung Pacific. Japanese stands in a class by itself, unless we accept its doubtful link with Korean; so does Basque; so does a group of languages spoken in the Caucasus, of which Stalin's Georgian is one. Such terms as "African Negro languages," "American Indian languages," "native Australian languages" represent geographical rather than linguistic concepts. There are within those groups separate language characteristics apparently as distinct as those differentiating English from Arabic, or Turkish from Chinese.

Indo-European is the name given to the family of languages to which English belongs. The name is based on the fact that this family covers most of Europe and extends eastward as far as northern India, with a total body of speakers of over one billion. Indo-Germanic is a synonymous term preferred by German linguists, based (outside of reasons of national pride) on the fact that it includes the easternmost and westernmost members of the family.

In most Indo-European languages, the numerals from one to ten and the words of close family relationship (father, mother, sister, brother, etc.), as well as a number of other fundamental words, are recognizable as coming from the same roots. "Brother," for example, is easily discernible in the German *Bruder,* less easily distinguishable in the Irish *bhrathair,* the Latin *frater,* the Greek *phrater,* the Russian *brat,* the Sanskrit *bhrātā,* the Persian *birādar.*

As far back as the sixteenth century, an Italian writer who visited India commented on the fact that there were startling resemblances between Sanskrit and Italian. "Six," "seven," "eight," "nine," "god," "snake" are in Italian *sei, sette, otto, nove, dio, serpe,* in Sanskrit *sas, sapta, astau, nava, deva, sarpa.* Much earlier, in the first century B.C., a Roman grammarian, Marcus Terentius Varro, had noticed the similarities between Greek and Latin, but had come to the erroneous

conclusion that Greek was the mother-language, Latin the daughter-tongue. Noah Webster, of dictionary fame, believed "Chaldee" to be the original universal language, but he also noticed the kinship between Greek, Latin and the Germanic languages before it was generally recognized. It remained for Bopp and the Grimm Brothers, at the beginning of the nineteenth century, to create the comparative method by which the exact nature of the relationship among the Indo-European languages was definitely ascertained.

Within the great Indo-European family (which, incidentally, includes about half of the world's population) there are sub-groups, some of several hundred million speakers, like the Germanic, Romance, Slavic and Indo-Iranian, others, like the Celtic, Greek, Albanian and Armenian, which are quite small.

The justification for these sub-groups is obvious. Languages like French, Spanish and Italian, stemming directly, in historical times, from one common ancestor, Latin, show closer resemblances to one another than to related but more distant Indo-European tongues like Hindustani, German or Welsh.

It is supposed that in prehistoric times, before writing appeared, the speakers of the original Indo-European parent-language formed one closely knit group, and that by successive waves of migration bodies of speakers detached themselves from the original homeland and the other groups, losing contact with them and allowing their speech to turn into a dialect of the original, still recognizable as coming from one source, but becoming more and more different as time wore on, to the point where it would not occur to the man in the Moscow or New York street to imagine that the Russian of the one and the English of the other were once the same tongue. Interestingly, this process of migration and differentiation, on a far greater scale and over a far longer period of time, is also postulated by those who believe that all of the earth's languages were originally one. The modern language which is supposed to be closest to the original parent Indo-European speech is Lithuanian, the tongue of about two million people on the shores of the Baltic.

English belongs to the Germanic branch of Indo-European, though with qualifications. The Anglo-Saxon that forms the backbone of our tongue, particularly in its spoken, everyday aspects, was once very close

to the Low German dialects of the Dutch and German North Sea
coastal areas. But as a result of the Norman conquest of England in
1066 the English language acquired such an extensive body of French
and Latin words and grammatical forms that present-day English is
best described as a fundamentally Germanic tongue with an imposing
Romance superstructure.

The national language that is the closest relative of English is
Dutch, with its Belgian variant, Flemish, and its South African variant,
Afrikaans. Next comes standard German, while the Scandinavian
languages are slightly more remote. Frisian, a variant of Dutch spoken
along the Dutch and German North Sea coast, is the foreign speech
that comes closest to modern English, as shown by the rhyme: "Good
butter and good cheese is good English and good Fries." Icelandic, a
Scandinavian tongue with less than one hundred thousand speakers,
which has undergone very little change since its inception as a branch
of old Norse, carried by Viking explorers to the land of the geysers, is
the modern tongue that most resembles our ancestral Anglo-Saxon as
spoken in the days of King Alfred and Canute.

Since English, German, Scandinavian and Frisian can be traced
back uninterruptedly to the seventh or eighth century, and since the
further back we go the closer these languages come together in struc-
ture and vocabulary, it is not unreasonable to suppose that there was a
primitive Germanic tongue, which had broken up into our known
languages not too long before the appearance of the latter. This primi-
tive Germanic, in turn, had broken away from the parent Indo-Euro-
pean stock an undetermined number of centuries previously.

The Romance tongues are so called because they stem directly from
Latin, the language of the Romans. They include French, Spanish,
Portuguese, Italian and Rumanian, along with non-national tongues
like Provençal, Catalan, Sardinian and the Rumansch of Switzerland.
Latin had at least two ancient relatives, Oscan and Umbrian, which
formed with it the Italic branch of Indo-European; but Oscan and Um-
brian were swallowed up in the course of Roman expansion. The
Logudorese spoken in central Sardinia today is by far the closest to
ancient Latin of the Romance languages, though this honor is often
erroneously claimed by Rumanian and Rumansch. "Romania" was a
term devised in the fifth century to describe those parts of the former

Roman Empire where Latin had become and continued to be the popular spoken tongue. The Rumanians, who had been separated from their Latin-speaking brothers of the west by the Slavic invasion of the Balkans, retained the name and appropriated it for their exclusive use. Rumanian is indeed the descendant of the Latin brought by Trajan's legionaries to Dacia around A.D. 200, but is differentiated from the western Romance languages by abundant infiltrations of Slavic words and constructions, which give it a distinctive flavor.

The Slavic tongues show perhaps closer connections among themselves than most of the other Indo-European branches. An Italian and a Spaniard, or a Spaniard and a Portuguese, each speaking his own tongue, will understand each other with difficulty. None will understand a Frenchman or a Rumanian without special study. A German, a Hollander, an Englishman and a Swede will be unable to carry on intelligibly if each insists on using his own tongue. But a Russian, a Pole, a Czech and a Yugoslav can manage to achieve a fair degree of understanding.

The Slavic languages are sometimes grouped with the Baltic tongues (Lithuanian and Lettish) to form a Balto-Slavic group, but while Lithuanian and Lettish are fairly close to each other, they are comparatively remote from the Slav tongues.

The Celtic languages are divided into two branches: Goidelic, including Irish, Scots Gaelic and Manx, and Brythonic, composed of Welsh, Breton and Cornish. A third Celtic branch was Gaulish, once spoken extensively on the European continent and even in Asia Minor (St. Jerome, in the fourth century, remarks that the Galatians speak like the Gauls). Such names as Galicia, appearing in Spain and in Poland, bear witness to Gaulish wanderings. But today Gaulish has become extinct, while its smaller brothers live on.

Greek, Armenian and Albanian form separate small branches of Indo-European, with approximately eight, two and one million speakers, respectively.

The easternmost member of the Indo-European family is Indo-Iranian, which comprises the Persian of Iran, the Pushtu of Afghanistan, and a host of languages and dialects of northern and central India, from ancient Sanskrit, through the medieval Prakrits and Pali, to the modern Hindustani, Bengali, Oriya, Rajasthani, Punjabi, Marathi and

many others. No less than three hundred million people speak Indo-Iranian languages today.

Equal in historical importance, though not in numbers, with Indo-European is the Semito-Hamitic family of North Africa and the Near East. Most widespread among the modern Semitic tongues is Arabic, most influential upon the history of civilization is Hebrew. The Hamitic branch includes, among others, the ancient Egyptian of the hieroglyphic inscriptions, the medieval Coptic that issued from it, the Berber tongues that are intermingled with Arabic in North Africa, and the Kushitic tongues of Ethiopia.

Ural-Altaic includes such tongues as Finnish, Estonian, Hungarian and Samoyed, in its Uralic branch; Turkish, Mongol, Tungus and Manchu in its Altaic branch.

The Sino-Tibetan languages of southeastern Asia (Chinese, Thai, Burmese, Tibetan) enjoy the distinction of having the world's second largest body of speakers, about five hundred million, being surpassed in numbers only by Indo-European.

Japanese and Korean; the Caucasian languages; the Dravidian tongues of southern India; the Malayo-Polynesian tongues of the Pacific are separately classified, while for the tongues of the African Negroes, the North and South American Indians, and the natives of Australia and Papua classification is difficult and incomplete.

Of picturesque interest are many small language groups that have no apparent affiliation. The Ainu of the Japanese island of Yezo, spoken by a white-skinned race of perhaps twenty thousand, shows a mysterious, though probably chance affinity to the Celtic languages and French in saying "four-twenties" for "eighty"; it may be related to some dying tongues of eastern Siberia. Basque, a mysterious tongue spoken by about one million people in northeastern Spain and southwestern France, is said to be the descendant of ancient Iberian, the language of Spain before the coming of the Indo-Europeans. Attempts have been made to link it with Berber and ancient Egyptian, with certain African Negro languages, with the tongues of the Caucasus, even with the Iroquois of North America, but with no success. The ancient Etruscan of central Italy has left us some nine thousand inscriptions, some quite lengthy, but no satisfactory interpretation of them has been achieved.

Is there a possibility that our present classification of languages will be improved? More light is being shed upon language affiliations all the time, as more material is discovered. It is even possible that one day the dream of some linguists will come true, and all languages be proved to have a common origin.

Linguists, however, are hard-headed scientists, not impractical theorists. Before they will accept a hypothesis, however attractive, the proof must be cogent beyond the shadow of a doubt. Our present system of classification and affiliation of the language families will in the course of time be considerably modified and improved. Beyond that, no promises can be made.

The Evolution of Language

Stability in language is synonymous with rigor mortis.—Ernest
Weekley

*We ain't what we want to be, and we ain't what we're goin' to be,
but we ain't what we wuz.*—South Carolina mountain proverb

Many years ago, I was requested to tutor in French a young girl
who had to take College Entrance Examinations. Knowing that she
had had four years of Latin as well as three years of French, I spared
no occasion in the course of the tutoring to remind her that certain
French words which she had difficulty in remembering came from
Latin words which she knew. For a time she took it patiently,
though with a somewhat bewildered air. But one day she finally
blurted out: "Do you mean to tell me that there is a *connection* be-
tween Latin and French?" In the course of four years of one language
and three of the other, it had never occurred to any of her Latin
teachers to inform her that Latin had descendants, or to her French
teachers to tell her that French had a progenitor!

This episode is not meant, at least at this point, to be a reflection
upon some of our language-teaching methods. It simply illustrates
certain widespread areas of ignorance in our general linguistic knowl-
edge, and at the same time serves as an example of how languages
evolve.

You almost never recognize people from their baby-pictures, seldom
from their boyhood photographs. It is only when the individual in the
family album reaches the adult stage that recognition begins to dawn.
Still, what amazing changes are in evidence between the age of twenty
and that of forty, and again at sixty!

It is the same with languages. The girl in our story was at least

normally intelligent. Still, faced with Ciceronian Latin on the one hand and Molièrian French on the other, and not being vouchsafed vital information about their relationship, she had more or less naturally assumed that they were no more closely related to each other than either was to English. It was as though she had been shown a portrait of a boy of fourteen and another of the same boy when he had become a man of fifty.

Languages change as human beings do, but the changes are spread over periods of centuries instead of years. Save at special times, the change is all but imperceptible to the speakers. As you look in the mirror each morning you are not aware of having changed from the day before. Yet the time comes when you are no longer a child, but a man; no longer a young man, but a middle-aged, then an elderly man. Yes, languages die, too, like individuals. They may decompose into fine dust, or a heap of bones from which it is difficult to reconstruct the image of the living organism that once was there. They may be embalmed and preserved for posterity, changeless and static, life-like in appearance but unendowed with the breath of life. While they live, however, they change.

The language-stream of which we have by far the most complete, unbroken record is the Latin-Romance. From the fifth century B.C. until today this stream unfolds before our eyes like a majestic river whose course can be explored from the source to a point beyond which nothing can be explored, because the future is inscrutable. If it is our purpose to follow the evolution of language, it will be far better served by following this stream than any other. Yet, as we do so, we shall have the assurance that save for matters of historical detail we are following the stream of language in general. Differences in linguistic history are of degree, not of kind.

Latin issues from the sub-soil as a tiny rivulet about 500 B.C. Its prehistory is unknown because of the lack of written records before that time, but we can assume that a group of Indo-European speakers, striking southward and westward from their original homeland, and making changes in their language as they went, finally found their way across the Alps into the Italian peninsula, where they found people of different racial and linguistic stock. When Latin first appeared, it was the tongue of a small body of speakers settled around the mouth

of the Tiber River in west central Italy. To the south and east of them were close relatives, Faliscans, speaking a kindred tongue, Sabines and Sabellians who spoke Oscan, a language of the same Italic subdivision of Indo-European as Latin, but already strongly differentiated. Another group of Italic-speaking people, the Umbrians, had settled to the northeast, while the immediate northern neighbors of the Latins were the non-Italic, non-Indo-European Etruscans, a powerful, mysterious race whose untranslated records appear throughout northern Italy, in isolated localities of the south, and even in some of the remote islands of the eastern Mediterranean. The valley of the Po in the extreme north of Italy was held by Celtic-speaking Gauls, the cities of southern Italy and western Sicily were for the most part Greek settlements. In both north and south we have traces of other prehistoric races, speaking vanished languages (Ligurian, Rhaetic, Venetic, Messapian, Sicel) of which only a few fragmentary and undecipherable inscriptions have come down to us.

The history of the Latin speakers and their language was from the first a record of a bitter struggle for survival; against the Etruscans, who at one time conquered Rome and established their own dynasty of Tarquinian kings, later expelled by the popular movement that set up the Roman Republic; against the Gauls, who swept down to the very gates of Rome on repeated occasions; against Rome's own Sabine and Sabellian kinsmen. By the middle of the third century B.C. Rome had established her hegemony over the Italian mainland. The Etruscans were subjugated, the Gauls driven back to the foothills of the Alps, the Umbrians, Oscans and Greeks of central and southern Italy absorbed or turned into allies, and Rome was ready to embark upon a career of overseas conquest and to grapple with Carthage, the great seafaring power of the Mediterranean.

The Latin language as it first emerged in the fifth century B.C. was a rough, elemental tongue, indicative of a military-agricultural civilization, and lacking most of the refinements of syntax and vocabulary which were later to distinguish it, yet endowed with all the morphological complexities of typical Indo-European structure. It was a language of case-endings and verbal terminations, making scant use of prepositions or fixed word-order. From the standpoint of sounds, the archaic Latin language does not seem to have differed greatly from its

later Classical counterpart; vowel-sounds were distinguished by long and short quantity, and a good many diphthongs appeared which the later language turned to simple long vowels (*deicō,* "I say," for instance, later became *dīcō,* and *oinos,* "one," became *ūnus*). Consonant-sounds displayed the same lack of certain groups which appears in later Classical Latin: the sounds represented in English by *ch* of "church," *sh* of "she," *j* of "joke," *s* of "pleasure," *th* of "thing" or "this," *li* of "million," *ni* of "onion," were absent from the Latin sound-scheme.

Fair samples of this early Latin language are the fifth century B.C. inscription on the belt-buckle found near Praeneste (*Manios med fhefhaked Numasioi,* "Manius made me for Nummerius," for which the Classical Latin equivalent would be *Manius me fecit Nummerio*), and the third century B.C. inscription appearing on the tomb of Scipio (*Honc oino ploirume cosentiont Romai duonoro optumo fuise virom Luciom Scipione,* "The majority in Rome agree that this one man, Lucius Scipio, was the best of the good"; the Classical equivalent would be *Hunc unum plurimi consentiunt Romae bonorum opptimum fuisse virum Lucium Scipionem*).

Rome's victorious series of wars against Carthage served on the one hand to carry Latin to such distant lands as Sicily, Sardinia, Spain and north Africa, on the other to bring Latin in closer contact with the more polished Greek of the southern Italian and Sicilian cities. These Greek contacts were shortly expanded by the conquest of Greece itself, as well as Asia Minor and the Balkans. At this point, Latin begins to take on its Classical aspect. Unwieldy sounds are discarded, the morphological structure is regularized, syntax assumes a more sonorous and rhythmical outline, and Greek loan-words dealing with all phases of more graceful living, like *hora* ("hour"), *theatrum* ("theater"), *machina* ("machine"), *cathedra* ("seat"), *schola* ("school"), *thesaurus* ("treasure"), begin to pour in, mingling with an older, earlier layer of foreign borrowings from Etruscan and Oscan which had included such forms as the words for "wine" (*vinum*), "ox" (*bos*) and "wolf" (*lupus*).

Classical Latin finally emerges in all its brilliancy about 100 B.C., and holds undisputed sway for three hundred years and more. This is the language of Caesar, Cicero and Virgil, a smooth, polished tongue,

capable of expressing the most complex notions, the loftiest of poetic and philosophical thought, the keenest of legal and juridical expression. Remembering that the language of poetry and oratory exemplified by Virgil and Cicero is always to some degree artificial, we may nevertheless accept Caesar's military communiqués as typical of the cultured language of the period: *Gallia est omnis divisa in partes tres, quarum unam incolunt Belgae, aliam Aquitani, tertiam, qui ipsorum lingua Celtae, nostra Galli appellantur..* ("All Gaul is divided into three parts, one of which the Belgians inhabit, another the Aquitanians, the third those who in their own tongue are called Celts, in ours Gauls.")

This language of Classical Rome still reveals an overwhelming predominance of ancient Indo-European features. Vowel-quantity persists; so does the relative paucity of consonant-sounds. The grammatical structure hinges almost completely on inflectional endings that indicate gender, number, case, person, tense, mood and voice. The syntax has become supple and graceful, with involved constructions partly imitated from the Greek, partly developed by the Romans themselves. The vocabulary is greatly expanded, by means of word-formation, word-coinage and word-borrowing, to the point where it satisfies all the requirements of a highly complex civilization.

Some linguists claim that this Classical Latin tongue which we still learn in the schools was largely an artificial device, used merely by a literate and literary *élite* for purposes of writing, and that the language of the masses at this period had already undergone a vast amount of transformation in the direction of the modern Romance tongues. For this view there seems to be little justification. While we can readily grant that the involved subordinate clauses and choice vocabulary of the writers, particularly the poets, did not extend to the lower classes, and that a great amount of slang was bandied about which did not find its way into the literary records that have come down to us (which are, by the way, only a small fraction of the total output of those centuries), still there is little reason to suppose that the sounds and the grammatical forms, which constitute the real backbone of a language, diverged noticeably from the Classical standard. People who think the Latin cases and verb-forms were too difficult for the Roman gladiators and slaves forget that similar linguistic complexities appear today in the mouths of illiterate Russian and Lithuanian peas-

ants, who, having learned them from childhood in given contexts rather than out of grammar-books, experience no apparent difficulty with them. There has come down to us a marching song of Caesar's legionaries, of which a few lines are given for purposes of comparison:

> *Ecce nunc Caesar triumphat qui subegit Gallias. . . .*
> *Brutus quia reges ejecit, consul primus factus est;*
> *Hic quia consules ejecit, rex postremo factus est.*

(Behold now Caesar triumphs, who subdued the Gaulish provinces. . . .
 Brutus, because he threw out the kings, was made the first consul;
 He, because he threw out the consuls, has now been made king.)

The charge of excessive literary influence can hardly be raised in the case of a military marching-song, and there is nothing in its language, particularly its morphology, to distinguish it from Caesar's own bulletins.

But new historical factors were soon to inject themselves into this picture of a seemingly stabilized, universalized tongue. First came the levelling impact of Christianity, with its emphasis on spiritual equality and the importance of the individual, imparting a new dignity to the speech-habits and speech-tendencies of the lower classes, and breaking down Classical standards of linguistic "purity," admiration for Classical pagan models, and the refinements of Classical syntax and vocabulary, at the same time that it brought into Latin a new wave of word-importations, some, like *abba* ("father," "abbott") from the Aramaic, but the majority, like *presbyter* ("elder," "priest") and *baptizein* ("to baptize") from the Greek of the New Testament and the earliest Christian writers.

The force of this impact can hardly be overstressed. The official language, hitherto kept within traditional bounds by literati and grammarians, began to throw off its aristocratic shackles and to vulgarize itself. As a tool of Christian propaganda and conversion, it had to be revised downward so as to reach masses of people in the distant provinces who had never been touched by Classical literary influences. The result was that Latin began to change, imperceptibly at first, then more and more rapidly.

The vowel-quantities of the Classical language were among the first casualties. The language of the lower classes tended toward stressful,

emphatic utterance, and a strong stress-accent almost inevitably length-ens the accented vowel of a word and shortens and obscures those vowels in the word which are not accented. By the end of the fourth century A.D., written Latin had not greatly changed its appearance, save in matters of elegant style and vocabulary, but spoken Latin had developed a new sound-pattern, wherein stressed vowels were drawled, unstressed vowels dulled, weakened, and often dropped. Probus, a grammarian of the period, warns his readers that they should pro-nounce *oculus* ("eye"), not *oclus, calidus* ("warm"), not *caldus*. The drawling and mouthing of stressed vowels led to changes in the near-by consonants, and we find words having unvoiced consonants like *p, t, c* between vowels shifting these consonant-sounds to their voiced counterparts, *b, d, g* (*pagare* instead of *pacare,* "to appease," "to pay"; *amadus* instead of *amatus,* "beloved"). New palatal sounds arose, which had not appeared in the language previously. A word like *centum* ("hundred"), pronounced *kentum* in Caesar's times, now be-came *tsentu* or *chentu* in pronunciation, though the spelling did not change (even today, French, Spanish and Italian use *c* in *cent, ciento* and *cento,* though the first pronounces it like *s,* the second like *th,* and the third like *ch*).

Most important of all, the weakening of final vowels began to undermine the system of case-endings, causing in the minds of the speakers a confusion that had to be repaired by new syntactical devices. A Roman of Caesar's day found no difficulty in distinguishing between *Petrum* ("Peter," direct object) and *Petrō* (dative case, "to Peter"). But as the final *-um* of *Petrum* and the final *-ō* of *Petrō* became indistinct, the two forms merged in sound, and confusion of meaning arose. There was only one thing to do: put the merged form immediately after the verb if it was meant to be the direct object of that verb, or use a prepo-sition along with it if it was meant to convey the meaning of "to Peter."

With the fifth century came the great barbarian invasions and the final downfall of the Roman Empire. What part the newcomers may have played in the process of linguistic transformation they found going on is still a matter of controversy. The majority of sig-nificant sound- and grammar-changes were already in progress when they arrived, and they may or may not have added to them. But there is no controversy about the great contribution they brought to the

vocabulary of the period. Latin, which by this time was becoming definitely a Vulgar, as distinguished from a Classical tongue, accepted hosts of new words from the Germanic invaders. A lexicon of words and forms which do not appear in the Classical period, but are to be found in later Latin writings, consists of eight large volumes. Many of these words are artificial coinages based upon existing Latin and Greek roots, prefixes and suffixes, but an even greater number consists of importations brought in by the barbarians. Among them we find words like *wadjo,* whose Anglo-Saxon cognate is "wed," and which gives rise to the later French *gage,* from which English still later borrows "gage" and "engage"; *wîsa,* Anglo-Saxon *wise* of "in wondrous wise," which in French later turns to *guise* and is borrowed back by English; *hatjan,* which is cognate to the English "hate" and later develops into French *haïr; marah-skalk* ("horse-groom"), which later becomes the French *maréchal* and is reborrowed by Germanic English in the form "marshal," which no one thinks of associating with our native "mare"; *kausjan,* later to become the French *choisir,* whose Anglo-Saxon form was *ceosan,* from which we get "choose."

Between the fifth and the eighth centuries, the process of linguistic fermentation went on, powerfully aided by the new Germanic leaven. The language, nevertheless, continued to be Latin, a Latin farther and farther removed from Classical standards and already revealing a strong trend toward Romance. A sample of this breakdown Latin, taken from a deed of sale of the eighth century composed in Gaul, is instructive: *Constat nus at alliqua fimena nomine Nautlindo, vindemus tibi pecia de maso probrio jures meo.* ("It is stated that we are selling to you, a certain woman Nautlinde by name, a piece of farm-land of my own property.")

In this passage, the Classical cases have all but disappeared. Prepositions are used which the Classical language would decidedly have dispensed with. Words that are either not Classical or not Classically used are of frequent occurrence. The state of the Latin language in these final centuries of its existence as a vernacular may be and frequently is described as Proto-Romance. In spite of this, it was still fairly unified. Little if any reference is made during the centuries preceding the ninth of any linguistic differences or difficulties in the lands that had once formed the western provinces of the Empire, Iberia, Gaul, Italy. The

numerous documents that have come down to us from that period bear
extremely few traces of the divergences that were later to arise among the
various Romance languages. The natural centrifugal force of language,
tending to dialectalize a unified tongue once the artificial controls of a
common government and institutions, education and communications
are removed, was indeed at work, but it had to fight an uphill struggle
against a deeply rooted tradition of Roman unity that had been in
operation for many centuries, as well as against the more recent and
perhaps even more powerful consciousness of a western Christian unity
fostered by the Church, whose everyday language was the Latin it had
inherited from the Empire.

The break, however, had to come. The growing feudal system,
making every community economically self-sufficient, tended more and
more to break down the traditional sense of unity, at the same time
that lack of schooling and deepening ignorance caused the spoken lan-
guage of each community to degenerate faster and faster from Latin
standards, independently of the innovations going on in neighboring
communities. Shortly after the beginning of his reign, Charlemagne
urged the bishops and priests of his realm to use a more correct, gram-
matical language in their sermons and homilies, thereby revealing that
he did not yet have a clear-cut realization of the fact that Latin was
giving birth to new languages. But by 813, reversing his earlier edict,
he ordered the sermons to be preached henceforth not in the *lingua
latina,* but in the *lingua romana rustica,* thus acknowledging that a
new language, which was no longer Latin, had been born. From this
point on, the story of the spoken language of the western regions of
the former Roman Empire is no longer the story of Latin, but that of
the Romance tongues. Yet it is the same language, proceeding in an
unbroken stream, that shifts its course, but does not at any time cease
flowing.

A first sample of the new *lingua romana rustica* announced by
Charlemagne appears in 842 in the Oaths of Strasbourg, a treaty of
alliance sworn by two of Charlemagne's descendants in the presence of
their troops, who in their function of witnesses had to be addressed in
their own spoken popular tongue. It began as follows:

*Pro Deo amur et pro christian poblo et nostro commun salvament,
d'ist di in avant, in quant Deus savir et podir me dunat, si salvarai eo*

cist meon fradre Karlo, et in aiudha et in cadhuna cosa, sicum om per dreit son fradra salvar dift. ("For the love of God and for the Christian people and our common salvation, from this day on, insofar as God grants me the knowledge and the power, so will I help this my brother Charles, both in aid and in all things, just as one by right ought to help his brother.")

In this first document of the new French language we see, on the one hand, the continuation of many features of Latin, both Classical and Vulgar, on the other the emergence of new characteristics which set it apart even from the late Latin of the previous century. The six cases of Classical Latin have merged into two, a nominative-vocative distinguished by a final *-s*, the survivor of the *-us* of Classical Latin, and a genitive-dative-accusative-ablative, or oblique case, characterized by the absence of a final *-s* (the *-i, -ō, -um* endings of the Classical cases having merged or completely fallen away). This two-case system is the predominant morphological trait of Old French, a language which continued in use from the ninth to the fourteenth century, when even these two surviving cases finally merged into the single case-form of present-day French.

By way of contrast, Spanish and Italian emerged (at least in recorded written form) more than a century later, in 950 and 960 respectively. They were more conservative than French in the matter of sounds, retaining the Latin final vowels, but less conservative as to morphology, since they merged all the Latin cases into one from their very inception.

Continuing on French soil the history of the language that once was Latin, we find the Old French language coming into full bloom around the end of the ninth century and giving rise to a flourishing epic literature by the eleventh. Here is an excerpt from the first great epic poem of the Old French period, the eleventh-century *Chanson de Roland*:

> *Dist Oliviers: Paien ont grant esforz;*
> *De noz Franceis mei semblet aveir poi:*
> *Compaign Rodlanz, kar sonez vostre corn,*
> *Si'l odrat Charles, si retornerat l'ost.*
> (Said Oliver: The pagans have great numbers;

Of our Frenchmen it seems to me there are few:
Comrade Roland, pray, sound your horn,
So Charles will hear it, and the army will return.)

The language of the eleventh century shows further deep-rooted transformations from that of the ninth. Accented vowels, already lengthened by the stress-accent in the Vulgar Latin period, are now hammered out into diphthongs (Latin *bene,* "well," becomes *bien;* Latin *novum,* "new," becomes *nuef;* Latin *me,* "me," becomes *mei;* Latin *florem,* "flower," becomes *flour*). Latin unstressed vowels are frequently dropped, so that a word like *dormitorium* turns into *dortoir, duodecim* into *douze.* Consonants undergo drastic changes, *amata* becoming *amede,* then *aimée, ripa* turning to *rive, pacare* to *paiier,* then *payer. Sacramentum,* which was still *sagrament* in the ninth-century Oaths, becomes *sairement,* then *serment.* Structurally the language preserves a measure of Latin elasticity by reason of the retention of a double case, so that a construction like *lo pedre veit li filz* (Latin *illum patrem videt ille filius*) can still be used to mean "the son sees the father." Old French vocabulary shows resiliency, resourcefulness, and vigorous growth, along with the loss of certain segments of the old Latin lexicon. New words like *hommage, bachelier* are formed by grafting new and old suffixes on existing roots. Numerous Germanic and other loan-words appear, many of which the language has since discarded. Semi-learned words borrowed from the language of religion abound. The Old French of this period is a tongue of strong stress, harsh and full-mouthed sounds, comparatively little phonetic grace, but powerfully effective, more similar in rhythm to present-day English than to present-day French, the language of a race of hardy warriors and farmers, uncouth and unrefined, but earnest and sincere, even to the point of fanaticism.

Beginning with the twelfth century, however, as the differences among social classes deepen and the cultural standards of the aristocracy and bourgeoisie begin once more to rise in a civilization that had regained some measure of stability and equilibrium, a tendency becomes noticeable to abandon some of the more violent stress-features, to reduce heavy diphthongs and triphthongs to monophthongs (the diphthong *ue* of *nuef,* for instance, becoming the middle rounded

simple vowel now indicated by the *eu* spelling of *neuf;* the three vocalic sounds of *beau* merging into the single vowel-sound of the present pronunciation), to develop lengthier and more elegant syntactical constructions as an aid to clarity and expressiveness, and ultimately to reduce the two-case system to a single case-form. This process of transformation is fully completed by the fifteenth century, as indicated by a stanza from François Villon, the author who, more than any other, marks the inception of modern French:

> *Povreté tous nous suyt et trace;*
> *Sur les tumbeaulx de mes ancestres,*
> *Les ames de quelz Dieu embrasse,*
> *On n'y voyt couronnes ne sceptres.*
> (Poverty follows and tracks all of us;
> Upon the graves of my ancestors,
> Whose souls may God embrace,
> One sees neither crowns nor scepters.)

The language, having regained a measure of grace and refinement, now falls once more into the hands of a cultivated upper class, paralleling the experience of Classical Latin in the days of the late Republic and early Empire. From its foreign contacts, especially with Italian, it receives hosts of new words and new concepts. The Renaissance and Humanism begin to have their effect, and a large portion of the Latin and Greek lexicons is poured into French in the form of cultivated loan-words, often without regard for the fact that they already appear in the language as popular words. *Fragile,* for instance, enters as the learned doublet of *frêle,* the historical French development of Latin *fragilis,* while the learned *monastère* drives out the popular *moustier* which French had directly inherited and developed from Latin *monasterium.* Writers conscious of the Latin origin of their language give old popular words etymological spellings which are often ridiculous, sometimes erroneous (*vingt,* for example, from Latin *viginti,* "twenty," was *vint* in Old French; the *g* was at no time pronounced; *chevaux* from Latin *caballos,* "horses" was *chevaus* in Old French; *x* replaces *s* because at one time scribes wrote a final *-s* with a long flourish, crossing the end of the preceding *u,* and this flourish was erroneously interpreted by later scribes to be an *x* and slavishly imitated).

As for the cultured influences of the centuries following the fifteenth, French may be said to share them with the other great languages of western Europe. Phonological changes since the time of Villon have been relatively few (one might mention the group *oi*, as in *roi, froid,* which was still pronounced like the *we* of "wet," and the *ill* of such words as *fille,* still pronounced like the *lli* of "million" at the end of the eighteenth century). Morphologically, the structure of Villon still fundamentally holds. In the matter of syntax, the French of the seventeenth century developed a conscious, deliberate regularity and exactness which made it and still make it today one of the finest linguistic tools of precision and expressiveness in the world. The vocabulary of French has marched side by side with that of the major western tongues, acquiring the myriad terms of modern science and modern life. The standard French of today, elaborated by Vaugelas and Racine, Rousseau and Voltaire, Hugo and Chateaubriand, Gide and Camus, is, like the Latin of Horace, Livy and Juvenal, a language of dazzling refinement and deep-rooted culture, fully capable of infinite self-expression, fully equipped to take care of all the needs of the civilization it represents and typifies.

Yet in the French of today there are underground rumblings almost, if not quite, as perceptible as the stirrings of linguistic change that must have annoyed people like Cicero in the first century B.C.

To begin with, there is slang, a slang that seeps upward and outward from the language of the *banlieue* into that of the *élite*. Consider, for instance, the following passage taken from a modern French whodunit:

"Ne blague pas! La maçonnerie est solide, tu sais!—jeta Rouletabille à la Candeur—Tu peux y aller. Les anciens avaient un mortier épatant, y a pas à dire!" (" 'Quit your kidding! The walls are solid, and you know it!' Roll-Your-Marble slammed out at Innocence. 'You can go there yourself. The old fellows had some swell mortar, I'm telling you!' ")

We have now slang words like *cornichon, gosse, épatant, rigolo;* telescoped construction like *y a pas à dire, y a pas d' quoi,* dialectal and *patois* forms which are occasionally heard where one would least expect them, even a morphology wherein the real distinction between singular and plural is made not in the noun, but in the article (*le mur* is dis-

tinguished in speech from *les murs* not by the *-s* of *les* or *murs*, which is not heard, but by the vowel-sound of *les,* which differs from that of *le*). These and other characteristics of modern spoken French probably point to the shape of French to come, a language which may differ as much from the elegant language of La Fontaine as the Oaths of Strasbourg differ from Virgil's *Aeneid,* and which may not be called French at all, but go by an entirely different name in the roster of the world's future tongues.

DIALECTS

England and America are two countries separated by the same language.—G. B. Shaw

The question is often asked: "Just what is the difference between a language and a dialect?" Politically speaking, one might answer that a language is what is officially accepted as the national form of speech, a dialect what does not have such acceptance. This definition would eliminate as languages such tongues as Welsh and Breton, while Lithuanian and Lettish, not having been languages under the Tsars, would have become languages with the creation of the Lithuanian and Lettish Republics at the close of the First World War, and then would again have ceased to be languages as soon as these nations were absorbed by the Soviet Union.

From the literary standpoint, one might say that a language is a form of speech that has given rise to a literature, a dialect one that has not; this would establish Sicilian and Neapolitan, Ozarkian and Brooklynese as languages, while it would eliminate Sardinian and most of the languages of the African Negroes and American Indians.

A third reply is that there is no intrinsic difference between a language and a dialect, the former being a dialect which, for some special reason, such as being the speech-form of the locality which is the seat of the government, has acquired preeminence over the other dialects of the country.

Actually, there is no clear-cut reply to the question. Even linguists shrink from answering it, and rightly. When a language is examined under the microscope, it is found to be infinitely diversified. There is one form of cleavage and stratification along social and cultural lines, which leads to the infinite gradations of standard tongue, vernacular,

slang, cant and jargon. There is also a local, geographical division which extends not merely to regions and sections of a country, but also to towns and quarters of towns. Some linguists go so far as to assert that each speaker may be said to have a dialect of his own, as evidenced by the fact that his friends can identify him by his speech.

A language is often a conglomeration of, and compromise among, several forms of speech. Often the conglomeration and compromise fail to occur, or take place only partially. It may be easy enough to describe the British standard as "the King's English," based largely upon the pronunciation of the educated classes of London, which in turn represents a sublimation of southern English dialectal forms; or the Italian standard as the tongue of the educated classes of Florence; or the French standard as the speech of cultured Parisians. In reality, how many Englishmen use the King's English without trace of local intonation or peculiarity? How many Italians use Florentine? How many Frenchmen use Parisian?

Linguistic reality shows us that while it is fairly simple to set a written-language standard for a region or nation, it is quite another thing to impose a universal spoken-language standard. It further shows us that localisms of intonation, enunciation, grammar and vocabulary crop up everywhere and are extremely difficult to eradicate.

There is, of course, another and more optimistic side to the picture. Once a unified language has been established, dialects tend to sink lower and lower in the social scale, becoming what the French call *patois,* and to give way to the standard language. The movement, however, is somewhat like that of a line stretching out into infinity; it never is really completed. The Roman Empire succeeded in establishing written-language unity in all those of its provinces which accepted Latin as the popular tongue. But many scholars suspect that this unity was not paralleled by spoken-language unity, and that the local intonations and dialectal forms of the various provinces formed the basis for the later emergence of the diversified Romance tongues.

A similar movement is observed today in many countries that have achieved a measure of national unity. The local dialects are repressed, suppressed, discouraged. More and more members of the younger literate generations acquire the national language with few, if any, traces of the strong localisms of their parents. Yet the dialects some-

how manage to survive, leading a sort of underground existence from which they may at any moment reemerge.

Among the chief factors that tend to destroy dialects and unify language are education, military service, trade, a common religious background, common political institutions, a national consciousness, and a good system of communications and transportation. What is often forgotten is that a breakdown in any or all of these factors tends to have the opposite effect—to break up a unified language into dialects. Nation-wide linguistic unity is historically revealed to be largely a man-made, deliberately willed state of affairs. The natural tendency of language is centrifugal, not centripetal, and this means that language tends to break up into local varieties whenever contacts are lost and political unity ceases to exert its pull toward the center.

This means in turn that in the course of history we are faced with the alternation of the two movements, one of which temporarily prevails in accordance with historical, social, cultural, political, religious and economic conditions. Our Indo-European parent-language found it easy to break up into numerous diverging "dialects" (Celtic, Italic, Germanic, Slavic, Greek, Indo-Iranian, etc.) at a time when there was no community of political institutions, no cultural bond, no national consciousness, and when communications among the branches, once severed, could not be restored. But whenever historical conditions tended toward centralization, as in the days of the Roman Empire, the tendency of the official chosen tongue to impose itself over the other speech-forms became quite manifest, only to break down again when the artificial controls of civilization were removed. The tongue of the Anglo-Saxon invaders of England was identical with the Low German dialects of the mainland from which those Anglo-Saxons came; but within a century or two, by reason of lack of common institutions and communications, the Anglo-Saxon of England and the Old Frisian of the continent became differentiated. The tongue of the English settlers who came to America was, of course, identical with that of the Englishmen who remained behind. The migration to America took place at a period when education, trade, religious, cultural and political bonds all existed. But such were the difficulties of communication across the Atlantic that the English of England and that of the American colonies soon began to diverge, and the divergence continues to the

present day, though it may well be obliterated in the future by reason of vastly improved means of communication which bring one nation's speech-habits to the other nation by fast steamer, plane, radio and spoken films.

Americans are fond of discussing their own dialectal differences. Actually, these differences are trifling when compared to the tremendous divergences one finds in countries only a fraction of the size of the United States. It is easy to account for this. America was born and grew up in an atmosphere of modern, artificial conditions, under which localisms could not flourish with the ease with which they had blossomed in Europe's Middle Ages, when a mountain barrier like the Apennines proved far more impassable than the three thousand miles separating our eastern seaboard from our west coast.

Our comparative language unity should not, however, lull us into the erroneous belief that these conditions are fixed and immutable. Granted a change in historical conditions, a natural or man-made cataclysm whereby our railroads, motor highways, airplane routes, radio communications and motion-picture industry were disrupted, along with our unified political, social and educational institutions, our American language would inevitably succumb to the inexorable centrifugal force inherent in all language and localisms would quickly arise that would make the speech of California as unintelligible to the inhabitants of New York within a few generations or even decades as is the speech of England to the inhabitants of the German North Sea coast.

Dialectal divergences, like all language changes, are directly due to innovations. If the innovation has nation-wide or language-wide acceptance, no dialectalization will result. But if the innovation spreads over one portion of the speaking area and not over others, we have the creation of a dialectal feature. At this point it is up to the people who direct the nation's linguistic policies (or think they do) to determine whether the innovation shall be considered as forming part of the standard language (whereupon the non-innovating areas become to some extent dialectal), or whether it shall be rejected by the official national tongue, in which case the innovating areas are described as having developed dialectal features. The tendency among modern American linguists is to assume an attitude of neutrality with respect

to dialectalization, at least for what concerns American English, and to avoid labelling the dialect of one section of the country the "standard" or "official" speech. This criterion is, of course, not followed in Britain, where the King's English is official, or in the overwhelming majority of foreign countries, where the dialect of the capital has usually become or given rise to the standard language.

With regard to innovations that lead to dialectalization, two interesting observations have been made. The first is that dialects of isolated regions often tend to preserve old forms to a greater degree than the literary language, the speech of the Ozarks, for instance, coming closer in many respects to Elizabethan English than does the present-day speech of London. For this there is a valid reason; national, literary languages are far more exposed to the world's linguistic cross-currents than are remote dialects, and their tendency to innovate is correspondingly greater.

The second observation is that when people migrate from their homeland, they are more likely to keep intact the language of the period of migration than do those who stay behind. The English of the Appalachian mountaineers is closer to seventeenth-century English than any present-day English dialect; the French of Canada is closer to seventeenth-century French than is the Parisian of today; Yiddish is closer to fifteenth-century German than is present-day German; while the Portuguese of Brazil reflects the pronunciation of the period of discovery and colonization better than Lisbonese. This phenomenon, which is not universal, hinges to some extent upon the preceding one. Insofar as the mother-country is exposed to linguistic and literary cross-currents, while the colony remains comparatively isolated, the latter will naturally tend to be more conservative than the former. French-speaking Canadians, cut off from France and surrounded by English speakers, whom they regard with suspicion, if not antipathy; Jews segregated in the ghettos of eastern Europe; Brazilians with an ocean between themselves and Portugal, would naturally tend to conserve their older speech-forms. On the other hand, Americans come closer than Englishmen to seventeenth-century English only when they happen to be isolated Appalachian mountaineers; the rest of the American population, having placed itself at the crossroads of the world fully as much as the British, have proceeded to make innovations of their own.

Nevertheless, in the matter of sounds at least, many linguists hold that "General American" comes closer to the English of Shakespeare than does the King's English of today.

For what concerns the English of America, three main dialectal varieties are recognized: Eastern, Southern, and Midwestern (or General American), with about twenty, thirty and ninety million speakers, respectively. However, more careful investigation, such as is being carried on in connection with the Linguistic Atlas of the United States, reveals the presence of at least twenty-four well-defined regional dialects, most of which are located east of the Mississippi.

The following list of words, pronounced by an American speaker and listened to by an expert, usually suffices to place the speaker within twenty miles of his home locality: "merry," "marry," "Mary"; "wash," "water," "Washington"; "on," "off," "dog," "oft," "lot," "log," "sorry"; "about the house"; "greasy"; "father," "park," "part"; "first," "bird"; "can" (verb), "can" (noun); "ash," "ask." Each of these groups of words places the speaker east or west, or north or south, of a certain line, until he is restricted to a given small area. "Greazy," for example, would place the speaker south of Philadelphia, while "greassy" would place him north of Trenton. The pronunciation of *r* after vowels ("father" as against "fathah") distinguishes between a Philadelphian and a New Yorker. Most American speakers distinguish in pronunciation between "horse" and "hoarse," "for" and "four," "morning" and "mourning," but the local dialects of Philadelphia and New York, among others, do not.

A few localisms are the result of overcorrection. This is said to be the case with "Cincinnatah," "Missourah" and "Miamah" for "Cincinnati," "Missouri" and "Miami"; speakers who are conscious of erroneously using a final *-i* where they should use an *-a* in words like "Carolina," "Florida," "sofa" and "taffeta" will tend to correct the error even where it does not exist.

According to some authorities, the Southern drawl and the New England twang are in danger of disappearing, while Midwestern speech, or General American, is spreading. This is due to the many Midwesterners who move to other parts of the country and impose their type of speech. The process, however, is a very slow one.

In addition to regional dialects, the speech of the United States is

characterized by special localisms typical of a single city or even borough, and by immigrant dialects.

Among the first may be mentioned the perhaps overemphasized Brooklynese, which is in part straight slang, more or less common to all the large cities of the East. A recent humorous *Language Guide to Brooklyn* spoke of such expressions as *pahrmee* ("pardon me"), *lemeawf* ("let me off") and *anianfoolin* ("and I ain't fooling"), along with choice bits of syntax like "an I don' never get no ulcers." From the standpoint of dialect, these examples are hardly to be classed with the answer given by an Ozark mountaineer to an inquiry about the score of a baseball game: "Nary-nary in the seventh, with us'uns to bat." On the other hand, there are phonetic features in the Brooklyn speech which are said to arise from the influence of early Dutch settlers in Greenpoint. Chief among these is the interchange of *oi* and *er* ("boid" for "bird," "erl" for "oil," or, as one lunchroom waitress elegantly put it, "soiving de ersters"). Another is the use of *t* and *d* for the two sounds of *th,* as exemplified by "tree of dem bums struck out." But the matter of Dutch influence is viewed with suspicion in many reputable quarters, while the phonetic features in question seem to be common to other cities and boroughs, notably the Bronx.

Immigrant dialects, while quite picturesque, have a tendency to die out with the first or at most the second generation, surviving as a matter of humor on the stage. Linguists are agreed that there is very little chance that the sounds of American English will be permanently influenced by the pronunciation of immigrants. One notable exception to the mortality of immigrant dialects is the "Pennsylvania Dutch" of certain regions in Pennsylvania, which is not Dutch at all, but a direct descendant of the seventeenth-century Rheno-Franconian dialect of German. A chair of Pennsylvania Dutch language and literature was recently established by Muhlenberg College at Allentown, but the continued vitality of the dialect under modern American conditions is doubtful. Of particular dialectal interest are some of the expressions that have crept into local English from Pennsylvania Dutch, like "the milk is all" for "there is no more milk," "outen the light" for "put out the light," and "the paper wants rain" for "the paper predicts rain."

The dialects of Britain are far more numerous and divergent than anything we have in America. There are nine principal dialects in

Scotland, three in Ireland, thirty in England and Wales—this outside of Scots Gaelic, Irish and Welsh, which are in no sense dialects of English, but completely separate languages of the Celtic branch of Indo-European. Among the chief English dialects are: Cornwall, Devon, Somerset, Dorset, Gloucestershire, Oxfordshire, Shropshire, Lancashire, Westmoreland, Northumberland, Yorkshire, Lincolnshire, Norfolk, Cockney and Sussex. Cockney, the lower-class dialect of London, seems to be linked with Cockaigne, an imaginary country where the rivers flowed with wine and the streets were paved with pastry and roast geese. Some of the English dialects still use "thou" and "thee" instead of "you," a practice which in America is followed only by a few conservative Quakers. "Thik" is Wexfordshire dialect for "this"; Gloucestershire uses "thak" for "that"; "hoo" is Yorkshire dialect for "she," and it may be added that the Yorkshire speech is normally quite incomprehensible to the average American. In Sussex they use "Hastings ladies" for "large clouds," "scrump" for "apple," "butterfly day" for "bright day," and "drythe" for "drought." Ulster, in Ireland, uses "dayligone" for "twilight," while from Scotland we have imported "curmudgeon," said to come from the French *coeur méchant* ("evil heart").

The dialects of other important languages show even greater diversity. Ancient Greek, unlike Latin, had many definitely recorded dialects (Doric, Achaean, Ionian, Attic, etc.). Only one of them survives as a separate dialect, the ancient Laconian of Sparta, which comes down in the form of the modern Tsaconian. The others all merged into the national language, or *koine,* a term which arose in the fourth century B.C. to denote the common Greek tongue which had evolved out of the earlier dialects; the word is still used today to denote a common language in general use among people speaking different dialects.

French has numerous dialects, including the Picard, Norman, Lorrain and Walloon, the last-named of which is spoken in southern Belgium and parts of northern France. The Provençal spoken in southern France is rated as a separate Romance language rather than a dialect of French, and had a flourishing literature in the Middle Ages.

Medieval Spanish had three main dialects, but two of them, Leonese and Aragonese, have almost disappeared before the encroachments of Castilian. The last, however, has given rise to new dialectal forms,

including the Andalusian of southern Spain, on which most Spanish-American varieties are based. The dialects of Italy are, in proportion to population and area, probably the most numerous and widely divergent of any language; they include Sicilian, Neapolitan, Roman, Tuscan, Venetian, and the Gallo-Italian dialects of northwestern Italy, so called because the Gauls are supposed to have had something to do with their formation. German has two great divisions, High and Low German, but each is subdivided into innumerable local varieties. Russian shows comparatively little dialectalization, less perhaps than its kindred Slavic languages, like Serbo-Croatian, which is divided into the *shto, cha* and *kaj* dialects, depending upon which of the three words they use for "what."

The minor "dialects" of China have bodies of speakers larger than many of the national tongues of Europe. Among the principal Chinese dialects are the Wu of Shanghai, the Min of Fu Kien province, and Cantonese, each of which has between thirty and forty million speakers, and none of which is intelligible, in spoken form, to speakers of the others or of the national language. Interpreters have to be used in the Chinese National Assembly to make the speeches of the delegates from the various provinces intelligible to one another. Cantonese, which has more complicated tones than Mandarin, and permits consonant-sounds like *t* and *p* at the end of words, is the Chinese dialect most often heard in the United States.

The official literary languages of most countries are based upon a local dialect, which assumed the leadership, either because it was spoken in the region where the capital was located, or because its speakers gained political and military predominance, or because they set a cultural pattern for the entire country. These three possibilities are well illustrated by the three major Romance languages, French, Spanish and Italian. Standard French is the original dialect of the Ile-de-France, the region centering about the islands of the Seine within Paris; during the Middle Ages it fought a long and hard struggle for predominance with other northern French dialects, particularly Picard, which in the twelfth and thirteenth centuries was employed side by side with Francien as a literary tongue. But the fact that Francien was the dialect of the French court gradually set it in first place, and by the beginning of the fifteenth century the speech of cultured Pa-

risians became the official tongue of all of France. In Spain, Castilian predominance was assured by the fact that the inhabitants of the Castilian provinces took the lead in the war for the reconquest of Spain from the Moors, so that it was Castilian rather than Leonese or Aragonese that spread southward with the advancing Spanish armies that finally threw the Moors back into Africa in 1492. In Italy, where no political or military factor was involved, the predominance of Tuscan in its Florentine variety became established after Florence had given to Italy, in the first half of the fourteenth century, the mighty literary output of Dante, Petrarch and Boccaccio.

Standard Russian is based on the Moscow dialect, and standard Japanese on the Tokyo dialect. The "National Tongue" of China represents largely the North Mandarin prevalent in the region of Pei Ping. But in Germany, where political unity did not exist until a comparatively late date, it was the cultural factor that won out, with Luther's High German translation of the Bible setting the pattern.

Most of the local speech peculiarities of the countries of the New World, outside of the United States, were brought to America from the various regions of France, Spain and Portugal. Canadian French is close to the French of the seventeenth century as spoken in the northern French provinces. Many Spanish linguists assert that there is not a single speech peculiarity in any part of Spanish America, outside of local vocabulary borrowed from the native Indian tribes, which does not have its counterpart in some section of Spain. However, even outside of Indian borrowings, many vocabulary divergences have arisen in Spanish America for which the dialects of Spain are not responsible, and the same holds true for the Portuguese of Brazil in relation to the dialects of Portugal. Though all of Spanish America theoretically speaks the same Spanish, automobile tires are *llantas* in Peru, *gomas* in Cuba; an illiterate farm-hand is a *peón* in Mexico, a *guaso* or *roto* in Chile, a *guajiro* in Cuba, a *jíbaro* in Puerto Rico, a *pongo* in Bolivia.

The vocabulary divergences which can arise in various localities, even under circumstances most favorable to standardization, are often startling. Most of us are aware of the New York "block" vs. the Philadelphia "square," the New York "soft drink" vs. the Boston "tonic," the New York "bag" vs. the Midwestern "sack" and the Southern "poke"; the American "ticket agent," "freight car," "subway," "hood."

"battery," "dessert," "suspenders," vs. the British "booking clerk," "goods waggon," "underground," "bonnet," "accumulator," "sweet" and "braces." In other languages such differences are often far more extensive. Various sections of Portugal call a man's sock by the following names: *peúga, meia de homem, meia curta, miote, mieta, tornuco*. The *esquadra* (police station) and *mercearia* (grocery store) of Portugal are the *delegacia* and *venda* of Brazil. The *bodega* which is normally a wineshop in Spain is a grocery store in Latin America, the *cigarro* which in Spain is a cigar becomes a cigarette in Cuba, where *tabaco* (tobacco in Spain) means cigar.

Dialects, like the poor, are always with us. Attempts to eradicate them and standardize the language often meet with signal success, but new dialects will then arise out of the unified, standardized language. Like other local differences of food, dress and customs, dialects are often a nuisance. Yet they lend picturesque variety to language, and variety is the spice of life.

The Saga of Place-Names

No nation knows itself until it knows its past.—Ben Ames Williams

Historical linguists usually make much of place-names, and rightly. When a given territory changes hands, the spoken language of the former inhabitants may completely give way to that of the newcomers, but the place-names normally remain as a perennial monument to the people who first lived there, though they may change to the point where they are practically unrecognizable, like the Celtic or pre-Celtic Eboracum that ultimately became York. Often a few place-names are all that remain of an ancient and vanished language.

Toponymy, the study of place-names, is a science in itself. The Department of the Interior has a special bureau, staffed by competent linguists, whose task it is to make an accurate study of the place-names of America, the varied nomenclature of the States and cities, towns and hamlets, hills and mountains, rivers and lakes that constitute our country's physical self.

Our linguistic prehistory is well outlined in extent, though not described in depth, by the host of American Indian names that survive in our toponymy. Half of our States bear Indian names, with the remainder showing Spanish, French, English and Latin origin. Among the former, Dakota means "leagued" or "allied," having once been the home of the confederated Sioux tribes; Tennessee is "the vines of the big bend"; Iowa "the sleepy ones"; Oklahoma "the red people"; Kansas "a breeze near the ground"; Michigan "fish-catching place"; Kentucky "the dark and bloody ground"; Illinois "the tribe of perfect men"; Texas "Friends!," and Idaho "good morning!" Among the latter, some perpetuate the names of queens, virgin or otherwise (Vir-

ginia, Maryland); of kings, like Charles or George of England (Carolina, Georgia) or Louis of France (Louisiana); of regions of the Old World or the New (New York, New Jersey, Rhode Island, New Mexico); or of men prominent in history (Washington). Most historical in point of time, perhaps, is California, which seems to be derived from Califerne, an imaginary land appearing in the eleventh century French epic *Chanson de Roland*.

Our land is studded with names like Ossining ("place of stones"), Hoboken ("tobacco pipe"), Oswego ("place of flies"), Katonah ("sickly"), Ticonderoga ("brawling water"), Biloxi ("worthless"), Shenandoah ("daughter of skies"), Peoria ("place of fat beasts"), which pay tribute to the poetic and practical sense of the original inhabitants. Lake Success, temporary seat of United Nations, has nothing to do with hopes concerning that organization, but comes from an Indian *Suksat* whose meaning is unfortunately lost. The Mississippi ("father of waters"), was called in its lower course Malbanchya ("place of foreign languages") by the Choctaws, who were bewildered by the mixture of tongues spoken in the early French, Spanish and English settlements on its banks. Adirondack ("bark-eater") is the name bestowed by the Iroquois upon the Algonquins, for whom they had no love. Chicago comes from the Piankashaw Indian Chi-Kak-Quwa ("place of skunk smells"), a name fittingly bestowed upon a locality where many wild onions grew. Manhattan is said to mean, in the language of the Delaware Indians, "the place where we all got drunk," in reference to a drinking bout in which the natives polished off a barrel of Henry Hudson's rum, though according to another authority the name has the more sober meaning of "town on an island."

But these American place-names, picturesque and descriptive as they are, tell us little of prehistoric wanderings and happenings. It is otherwise in Europe and Asia, where almost every place-name contains a record of migrations and conquests, far-flung trading-posts and garrison towns. Many of the place-names of Britain are neither Celtic nor Roman nor Anglo-Saxon nor Norman, but were left behind by the vanished, mysterious dark-skinned race of the Picts who lurked on the further side of Hadrian's wall and who seem to have been related to the Iberians of Spain. The Celtic-speaking Gauls have left records of

their wanderings in the Galatia of Asia Minor, the Galicia of Poland and the Galicia of Spain, as well as in numerous localities of western Germany and northern Italy. The *-dunum* and *-acum* suffixes of many localities of Roman Gaul (Lugdunum, later Lyon; Cameracum, later Cambrai), even the *-lanum* of Mediolanum ("in the middle of the plain"), modern Milan, are Gaulish. Many of the towns, streams and mountains of the Italian peninsula bear the imprint of the Etruscans, Ligurians and Messapians. Gascony's ancient name, Vasconia, shows that its former inhabitants were Basques. The fact that at one time the Slavic world reached the eastern banks of the Elbe, whence it was driven back to the Vistula by the Teutonic Knights of the Middle Ages, is revealed by the Slavic origin of the name Prussia (once Borussia) and by the names of such cities as Berlin (Slavic for "wasteland") and Leipzig (from Slavic *lipa*, "linden-tree").

Historical events are confirmed and often clarified by place-names. Early Greek settlers, moving from their original home to Hesperia ("the land of the west"), fittingly called their new Italian surroundings Magna Graecia, or Greater Greece. They founded, among various cities, Naples and Palermo; the former was Neapolis, or "new-town," an anachronism today; the latter was Panormos, or "all-harbor," a tribute to the Sicilian capital's ship-sheltering qualities. Greek seafarers also gave its name to Malta (Melita, or "land of honey") and to the Balearic or Slingers' Islands (the root is the Greek verb *ballo*, "to hurl," which gives us "ballistics"; the inhabitants of the Balearics were the most skilful slingers of ancient times).

The Romans were among the great place-name givers of antiquity. Provence was named by them; it was Provincia, the best-loved province of the Empire, therefore the "province" *par excellence*. Many of their settlements were named in honor of Caesar Augustus; it is Caesarea Augusta that later became the Spanish Zaragoza, while Caesarea alone produced the French, English and American Jersey. Germany is probably not a German word at all, as proved by the native Deutschland; it is said to come from a Celtic root, meaning "neighboring," seemingly cognate to Latin *germanus* ("brother"), from which we derive our "germane" and Spanish its *hermano*. Germany, according to its Roman etymology, would be a "brotherly" country. Many cities in western Germany bear Roman names; Köln, which we know by its French

name of Cologne, is Colonia or "colony"; Münster is *monasterium;*
München, or Munich, is *monachos* ("monks"), with a German diminu-
tive suffix.

Medieval history is illustrated by two place-names of Spain: Castile,
which originally meant "castles," pointing up the fact that the center
of Christian resistance against the Moors was studded with fortresses;
and Gibraltar, from the Arabic *Jebel Tarik* ("Tarik's mountain").
Tarik was the leader of the Moslem hordes that swept into Spain in
the eighth century and overthrew the Spanish Visigothic kingdom.
The Latin name of Gibraltar had previously been "the Pillars of
Hercules," which reminds us of the role played by mythology in
toponymy.

Albion, poetic name for England, is derived from the giant son of
Poseidon, or Neptune, who, according to mythology, was presented by
his father with the island of Britain, but was later killed by Hercules.
The name, however, may also go back to an Indo-European root
meaning "white" (Latin *albus*), and the term "white island" may have
been suggested by the chalk cliffs of Dover. The Amazon River of
South America was so named by the explorer Orellana after a battle
with the natives in which the women fought more bravely than the
men, after the fashion of the legendary Amazons of antiquity. Nippon,
whose literal meaning is "sun-origin," sums up the legend about the
descent of the Japanese race from the sun-goddess Amaterasu. The
name Cipango for Japan which Marco Polo brought back to the West
is a Chinese translation, *jê pên kuo* ("rising-sun land"), whence also
"Japan." The Brahmaputra River of India is "the son of Brahma," and
the Solomon Islands were so named because their discoverer, Mendana,
created the legend that they had yielded gold for King Solomon's
temple, itself somewhat legendary.

In the New World, Mexico bears the name of Mexitli, the Aztec
war-god, while Lima in Peru was originally Rimac ("he who speaks"),
a reference to the Inca god who was supposed to prophesy.

Commercial products are responsible for a vast number of place-
names. Cassaterides is the name by which Herodotus mentions the
British Isles in the fifth century B.C.; the name means "tin islands."
The name of the Andes means "copper" in the tongue of the Incas.
Italy, in its Latin form Italia, goes back to an earlier Vitelia, "land of

calves," "land of cattle." The Faroe Islands are the "sheep islands" in Danish. Java is the Malay *Jawa* ("rice"), and our own United States is to the Japanese *Bei-ƙoƙu,* or "rice-land." Argentina is "silver-land." The name of the Barbados Islands means "bearded," and refers to the bearded fig-trees growing there. Brazil got its name from the fact that its coastal forests are rich in trees containing a dye known in Portuguese by that name; the dye had previously been named *brazil* after *braza* ("live coal").

Geographical and physical characteristics enter into many names of localities. Ecuador reminds us that the Equator traverses the country. The Deccan of India is the "south." Piedmont is "at the foot of the mountains," and the Dodecanese, to which we sometimes add a redundant "Islands," means "twelve islands" in Greek. The French name for the English Channel is La Manche ("the sleeve"), by reason of its shape and function. The Chinese name for China, Chung Kuo, means "middle country." Eritrea is "red," and owes its name to the adjoining Red Sea, which in turn got it from the minute red plant and animal life that abounds in its waters. Bab-el-Mandeb, at the Red Sea's entrance, is "gate of tears," and was so called because so many ships were wrecked in its treacherous waters. Volcanoes are usually graphically named: Popocatepetl, in Mexico, is Aztec for "smoke mountain"; Haleakala in Hawaii, the largest extinct volcano in the world, means "home of the sun," and Japan's Fujiyama is "fire mountain." Louisiana's Baton Rouge ("red stick") was so named because at the time of its founding a large red cypress reminded one of the founders of an enormous walking-cane.

Names of races and peoples often appear in the names of countries, sometimes adding to our historical stock of information. The ancient name of France, Gaul, or Gallia, must have sounded to the Romans like "land of roosters" (the Latin word for "rooster" is *gallus*), and the proud, boastful habits of the Celtic inhabitants may have contributed to this impression; at all events, the crowing Chantecler is still the emblem of France. The country's name, however, was changed after the coming of the Franks, a Germanic tribe that crossed the Rhine and overran the northern part of Roman Gaul, setting up its own Merovingian dynasty about A.D. 500. *Français* ("French"), *François* ("Francis"), "Frank" and "frank" all come from the name of this tribe. The

original meaning of "frank" is "free," whence *franc-tireur,* a guerrilla
sniper, free from the inhibitions of military discipline, and *lingua
franca,* the "free tongue" of the Mediterranean, or, in another interpre-
tation, the "tongue of the Franks," or westerners.

Belgium is named after the Belgae, an ancient Gaulish tribe in-
habiting that region. Their name seems to derive from the fact that at
one time they dwelt on the banks of the Bolga or Volga. The Bulgars
appear to have derived their name from the same source, but they
were accused of homosexual practices in the Middle Ages, and their
national name gave rise to French *bougre* and English "bugger."

The name of Russia seems to come from the Scandinavian tribe of
Rus, which overran the northwestern part of what is now the Soviet
Union, and set up a "Russian" dynasty. The Slavs, however, have a
legend about three brothers, Rus, Lech and Czech, who are said to
have founded the three north Slavic nations of Russia, Poland and
Bohemia. The Hungarians have a similiar legend about two brothers,
Hun and Magyar, who gave rise to the two kindred races, the Huns
and the Magyars; the western name of Hungary commemorates the
Huns, but the Hungarians call their country Magyarország, or "Mag-
yar-land."

Rumania is the "land of the Romans," and the Rumanians proudly
trace their ancestry to Trajan's Roman legionaries who settled Dacia,
a Roman province roughly corresponding to modern Rumania, in the
second century A.D.

Three Germanic tribes are responsible for Lombardy, Normandy
and the French name for Germany, *Allemagne.* Lombardy, in north-
ern Italy, is the land of the Lombards or Longobards ("long beards"),
fiercest and most uncouth of all the Germanic invaders who pene-
trated the former Roman Empire. In the Middle Ages the Lombards
were great bankers, whence London's Lombard Street; they were also
dealers in old furniture, whence "lumber." "Norman" is the French
development of "Northman"; in the ninth century the Northmen
invaded France, then made peace with the French kings and settled
down in the region which bears their name; they soon gave up their
Scandinavian tongue in favor of French, which they already spoke
when they conquered England in 1066. Scandinavian, however, con-
tinued to be spoken in the city of Bayeux until the twelfth century.

Allemand, the French word for "German," is in origin the name of a single Germanic tribe, the Alemanni, who used to be located in what is today Switzerland, southern Bavaria and the Tyrol. Gothland, in Sweden, is the "land of the Goths," and Gotham in England the "hamlet of the Goths," but the majority of the ancient Goths went to replenish the depleted populations of the Roman Empire. Andalusia in Spain is said to have derived its name from the Vandals, another Germanic tribe.

So far as the Near East is concerned, Palestine is not the land of the Jews, but that of the Philistines, or "wanderers." The Hebrew name for it is Erets Yisrael ("land of Israel"), and Israel itself means "alerted of God."

Names are often bestowed upon lands not by their own inhabitants, but by neighbors. Hindustan is not Hindustani, but Persian, and means "land of the river Sindhu"; the original Sanskrit name for India is Aryavarta ("dwelling-place of the Aryans"). Neither Abyssinia nor Ethiopia is a native name for the land of Haile Selassie; the first is Arabic and means "mixture of races"; the second, officially selected by the Ethiopians, is Greek, and means "land of the burnt faces." Manchukuo was the name bestowed by the Japanese upon the former Chinese province of Manchuria, but the name itself was appropriately Chinese for "Manchu-land." Neither Korea nor Chosen is Korean; the former comes from Japanese Kōrai, which in turn comes from Chinese Kao Li ("lofty-beautiful"); the latter is the Chinese Ch'ao Hsien, and means "morning freshness"; the Koreans call their country Hankuk.

Localities are frequently named after individuals. Bolivia is named after Simón Bolívar, who led in the struggle to liberate South America from Spanish rule. Bermuda is named after its discoverer Juan de Bermúdez. Saud' ī Arabia is named after the Saud family, which has been reigning since 1766, but the adjective also means "fortunate"; thus, by a strange coincidence, we have a modern Arabic literal translation of the ancient Roman name Arabia Felix, which was not applied, however, to the same section of the Arabian peninsula.

Changes in place-names frequently reflect historical transfers of power and political events, as well as nationalistic aspirations and ambitions. In ancient times, a city called Urusalim by the Babylonians

became Jebus when occupied by the Jebusites, then Yarushalayim when selected by David as the capital of his kingdom; it is now Jerusalem.

More recently, two regions called Austrasia ("eastern realm") and Lotharingia ("land of Lothair," one of Charlemagne's descendants), developed into Alsace-Lorraine; but that is the French name. Whenever the Germans held the region, they called it Elsass-Lothringen, and the name of the capital changed from Strasbourg to Strassburg. The Danubium Flumen of the Romans is the Donau to the Germans, the Dunaj to the Czechs, the Duna to the Hungarians, the Dunav to the Yugoslavs, the Dunarea to the Rumanians, and the Dunai to the Russians. The city called Bratislava by the Czechs is Pressburg to the Germans and Pozsony to the Hungarians. The island called Karafuto by the Japanese is Sakhalin to the Russians. The islands called Falkland by the British are the Malviñas to the Argentinians, who claim them, the name being derived from St. Malo, home port of the original French settlers. A section of what we call Antarctica is called Graham Land by the British and O'Higgins Land by the Chileans, who named it for their national hero, Bernardo O'Higgins.

The strangest discrepancies in place-names occur on the eastern coast of the Adriatic, where the old Italian names are giving way to Yugoslav ones; Zara, Sebenico, Spalato, Ragusa, Maleda, Lesina, Curzola and Veglia have become Zadar, Sibenik, Split, Dubrovnik, Mljet, Hvar, Korcula and Krk; but Zadar has again been changed to Titograd, in honor of the Yugoslav dictator.

Russian place-names underwent a thorough overhauling when the Soviets came to power. Petrograd, formerly St. Petersburg, became Leningrad; Samara became Kuibyshev; Nizhniy Novgorod became Gorkiy; Vyatka turned into Kirov; Tsaritsin became famous under the name of Stalingrad; Tver became Kalinin. Cities of the Polish Corridor which were germanized when the Nazis took over have gone back to their Polish names, which means that Posen is again Poznan, Thorn is Torun, and Graudenz is Grudziadz. German cities assigned to Poland have been polonized, with Breslau becoming Wroclaw and Stettin becoming Szczecin. Since East Prussia was occupied by the Russians, Koenigsberg has been rechristened Kaliningrad, after

the President of the Soviet Union who died recently, while Tilsit became Sovietsk and Friedland turned into Pravdinsk.

Even street-names reveal political trends. In a southern French town an old street called Rue des rois français (Street of the French kings) became Rue de la Révolution française when an anti-monarchist town administration was elected; the Communists were voted in, and the street became Rue de la Révolution sociale; then, with a shift to a Socialist administration, it turned into Rue de l'évolution sociale. In Germany, Kaiser Wilhelmsplatz has become Karl Marxplatz, Horst Wesselplatz has been changed to Ernst Thielmannplatz, and such names as Adolf Hitler and Hermann Goering have given way to Albert Einstein and Thomas Mann. In like manner, New York's Queen Street and Crown Street became Pearl and Liberty at the close of the American Revolution; but the boroughs of Kings and Queens remained. In more ancient times, a hill in Paris bore the name of Mons Martis (the mountain of Mars); with the advent of Christianity it became Mons Martyrum (the mountain of martyrs), the shift being in part justified by the fact that three saints suffered martyrdom there in the third century; this became the French Montmartre, and the name remained despite the attempt made during the French Revolution to change it to Mont Marat in honor of the revolutionary leader.

There are a few general facts concerning the place-names of our own and other lands that ought to be more widely known. The *Minne-* in Minnesota, Minnehaha, Minnetonka, etc., is a Dakota Indian word, meaning "water." The *los* and *las* of place-names of Spanish origin both mean "the" (Los Angeles, "the angels"; Las Vegas, "the plains"). The suffixes *-wich* and *-wick* come from the Latin *vicus* ("village"); hence Greenwich Village is redundant. The suffixes *-cester, -caster, -chester* of Leicester, Lancaster, Portchester, etc., come from Latin *castra* ("encampment," "fortified place"). The *Aber-* and *Inver-* so common in Scottish place-names (Aberdeen, Inverness) are Celtic terms for "estuary," "river's mouth."

Spanish place-names, and many place-names of the New World given by the Spaniards, are frequently of Arabic origin, by reason of the long domination of Spain by the Moors. Those beginning with *Al-* contain the Arabic definite article: Alcántara means "the bridge";

Alcázar, "the palace." Others begin with *Guad-,* from the Arabic *wad* ("river"); Guadalquivir, Guadalajara, Guadalupe all contain this prefix.

The prefix *Alt-* in place-names means "high" if the place-name is Romance: Altamura ("high walls"); "old" if the place-name is Germanic: Altdorf ("old village"); "gold" if the place-name appears in one of the tongues of northern Asia: Altai ("golden mountains"). The *-holm* of Swedish names means "island" (Stockholm, "pile-island"); the *Bel-* or *Byel-* of Slavic names means "white" (Belgrade, "white city"; Byelorossiya, "white Russia"); while the ending *-gorod* or *-grad* means "town" (Novgorod, "new-town"; Leningrad, "Lenin-town"). The suffix *-var* of Hungarian place-names means "fortified place," and the *-dam* of Dutch names is "dike."

In Hebrew names, *Beth-* means "house" (Bethlehem, "house of bread"; Bethel, "house of God"). The *-abad* so frequent in the place-names of India and Persia is a Persian suffix meaning "city." The *-pore, -pur* and similar forms appearing frequently in India and Malaya have the same meaning; Singapore is "lion-city." The *-stan* of Hindustan, Afghanistan, Pakistan, etc., is a Persian word meaning "country"; the Moslem generic term for the infidel lands of the west is Feringhistan ("country of the Franks") a tribute to the role played by the French in the Crusades, where Islam and Christianity clashed.

A place-name that seems directly taken from a linguistic manual is the southern French region of Languedoc, which means "tongue of *hoc";* it is derived from the southern French (Provençal) habit of using the Latin *hoc,* literally "this," as an affirmation, in contrast to the north of France, which used *hoc ille* ("this he"; with a verb like "did" or "said" understood); *hoc ille* later became *oil,* and still later the modern French *oui.*

Certain place-names are indicative of historical errors. Even though Columbus' name is immortalized in Columbia, Colombia, etc., America was named after Amerigo Vespucci by a map-maker who erroneously thought Vespucci had discovered the new continent. The theory has lately been advanced in France, however, that America comes from Armorica, the ancient Latin name for Brittany, and that Vespucci took his first name from the name of the new country rather than the reverse.

An even greater linguistic blunder occurred at the same time. Columbus, thinking he had reached the Indies, called the inhabitants of the New World "Indians," a term which until then had been properly reserved for the inhabitants of India. When the error was discovered, all sorts of distinctions were resorted to; the English thought of using "Red Indian" or "American Indian" as against "East Indian"; but plain "Indian" was a term that stuck like a leech to the unfortunate inhabitants of the Western Hemisphere. To avoid confusion, people began to cast about for a new name for the Indians of India, and got into a worse morass by using "Hindu" to describe both a religious and an ethnic group. "Hindu" might be etymologically correct to describe the inhabitants of Hindustan, but it is also used to denote those inhabitants of India who are of Aryan stock, or those who speak Indo-Iranian languages (the stock and the languages do not all coincide). Religiously speaking, "Hindu" covers those inhabitants of India (roughly two-thirds) who believe in the religion of Brahma, Vishnu and Shiva, as opposed to the Moslems, Sikhs, Jains, and all the other minority faiths of India.

Other historical misnomers are our use of "Dutch," which comes from German *Deutsch* and means "German," to describe the Hollanders, who call themselves *Nederlandsch;* and the term "Midwestern" which, however correct it may have been in the 1800's, is an anachronism at a period when the Midwest lies in the eastern part of the country.

There is also the matter of shifted geographical names. Scotland comes from the Latin *Scotia,* but *Scotia Major* in Roman times was Ireland, not Scotland, whose original name was Caledonia, from the Gaelic *Gaedeldoine* ("land of the Gaels"). In like manner, the ancient Roman province of Calabria lay on the Adriatic coast of Italy, above the heel of the Italian boot, while Bruttium was the province included in the boot's toe; today, Bruttium has become Calabria, and ancient Calabria is called by a name, Abruzzi, which though not related to Bruttium nevertheless sounds somewhat like it.

The great linguistic sport of name-coining has no happier hunting ground than place-names. The Russian Ukraine means "outlying" or "frontier district," the same idea appearing in the *Mark* or *March* of medieval empires (Ostmark, Spanish March), which was in the nature

of a buffer state between the core of the homeland and foreign regions. Transylvania, the name of a province disputed by Hungary and Rumania, is Latin for "beyond the forest," and our own Pennsylvania was similarly coined. Liberia, in West Africa, bears a name that means "Freeland"; it is an independent Negro republic, established by President Monroe for freed Negro slaves from America, and its capital, Monrovia, is named after Monroe. Australia was originally named *Austrialia del Espíritu Santo,* in honor of the Austrian-born King Philip III of Spain.

Among very recent coinages we have Pakistan, first heard of in 1932, which may be derived from Urdu *pak* ("pure"; "the country of the pure"), or from the initial letters of its component provinces, Panjab, Kashmir and Sindh. Benelux is a name similarly made up of the first syllables of Belgium, Netherlands and Luxembourg. Bizonia or Trizonia is the name given to the western regions of Germany included in the American, British and French zones of occupation. Unosia is the name coined by the French for a ten-acre section in Paris about the Palais de Chaillot which serves as a temporary home for United Nations. The Italians have coined a derisive name for the new Free State of Trieste, which has few inhabitants and a very small area: Topolinia, or "Mickey Mouse Land." A name has been suggested for New York City that would combine elements of the names of all the boroughs, but fortunately it failed to take hold: Brimaquonx.

There is an abundance of poetry in the world of place-names. Ceylon is from the native Sindhaladwipa ("lion island"), but among more poetic names bestowed upon it by Hindu writers are "Garden of the Sky," "Land of Dusky Leaves," "Island of Jewels," "Land without Sorrow." Formosa, the name bestowed by the Portuguese explorers on the island of Tai-wan, means "beautiful." The Chinese name for America is Mei Kuo ("beautiful land"). Tel Aviv, capital of Israel, is "hill of spring," and Addis Ababa, capital of Ethiopia, is "new flower." Vladivostok is "eastern might," Madras is "university," Chung King is "repeated congratulations" and Curaçao, capital of the Dutch West Indies, is a Portuguese word that means "healing."

Translation of place-names are often curious. Montenegro is an Italian translation of Serbian Crna Gora ("black mountain"), while Bosporus is an exact Greek translation of the English "Oxford." The

United States would never be recognized by an American from its Serbo-Croatian translation: Zjedinjene Države. Cairo, in Arabic, means "the conqueror," but the form is feminine, so that it might be translated "the triumphant female." Patagonia is "land of the big feet," coming from Spanish *patacón*, "big foot"; when Magellan first set foot on Tierra del Fuego in 1520, enormous foot-prints were discovered in the sand. Yucatán, in Mexico, means "what do you say?" in the language of the local Indians; this was the answer given by them to inquiries as to the name of the country. One Sicilian town bears the Greek name of Calimera, which means "good morning"; another, Linguaglossa, bears a name which is a repetition of the word "tongue," first in Latin, then in Greek; a third town, Canicatti, sounds in Italian like "dogs and cats"; actually, the name is of Arabic origin, and has an entirely different meaning.

Large, important, or historically known European cities usually have their names translated when they appear in foreign languages; Venezia, for instance, is Venice to the English, Venise to the French, Venedig to the Germans; London is Londres to the French and Spaniards, Londra to the Italians; Moskva is Moscow to the English, Moscou to the French, Mosca to the Italians. Smaller or less famous centers are generally left untranslated. American cities are normally untranslated, save for the "New" of New York and New Orleans.

The matter of the pronunciation of place-names sometimes leads to divergences, not only when the names are foreign, but even when they are indigenous. Great controversies arose during the war about the radio pronunciation of such Russian and Polish towns as Orel and Lodz, which in their native languages sound like Oryol and Wudge. To get the G.I.'s to pronounce with even approximate correctness the name of the French city of Rheims, someone devised the spelling "Rhance," while French railroad conductors occasionally pronounced it "Reems" to get themselves understood by American soldiers on leave. Even here in America we have New Orleans stressed on the first syllable by its inhabitants, but on the last by most Easterners; Houston, which is Hews-ton in Texas, but House-ton when it appears as the name of a New York City street; St. Louis, which is a source of offense to Missourians if you don't sound the final -s. On the Pennsylvania Railroad run from New York to Columbus, you pass through New-

ark, New Jersey and Newark, Ohio; the trainmen always make a careful distinction between the two; the first is stressed on the first syllable and the *-ark* sounds like *-erk;* the second is definitely New Ark, with both syllables equally stressed.

For a corruption of a retained foreign place-name, none better can be found than Key West, which in no way resembles a key, nor is particularly west of anything; it is simply the English sound-adaptation of a Spanish *Cayo Hueso* ("bone island").

American place-names show endless variety, but also some wearisome repetition, particularly of Old World counterparts. Where England has one Manchester, the United States has twenty-six. There are in America no less than thirty-seven Berlins, twenty-one Romes, nineteen Viennas. Cairo, Alexandria, Moscow, even Russia's discarded St. Petersburg have their namesakes in America. Athens, Sparta, Troy, Ithaca, Utica and Syracuse are only a few of the American representatives of Classical antiquity.

But, by way of contrast, we have also novel, highly imaginative names. Whose heart will fail to warm to What Cheer, Indiana, Social Circle, Georgia, Harmony, Pennsylvania, Friendship, New York, Humansville, Missouri, Helper, Utah, Loyal, Kentucky? Plain Dealing, Louisiana, Commerce, Georgia, Enterprise, Alabama, Export, Pennsylvania and Emporia, Kansas, sound as though they were taken from the terminology of the National Association of Manufacturers. Mathematicians will like Oblong, Illinois, Circleville, Ohio, and Crossville, Tennessee, while geographers will be pleased with North East, Maryland, Due West, South Carolina, and Meridian, Mississippi. Other picturesque American place-names are Wink, Texas, Sleepy Eye, Minnesota, Hominy, Oklahoma, Frostproof, Florida, while to H. L. Mencken's list of comical place-names in the United States one might add Boneyard Hollow, Polka Dot, Getaway, Greasy Ridge and Hogskin, all located in southern Ohio. And what shall we say of those two congenial and sports-minded Ohio towns, Basil and Baltimore, which decided to merge even to their names, with a resultant "Baseball," Ohio? "Santa Claus" as the name of an American town brings much business to the Post Office.

Another important variety of United States place-names has been supplied by the strong Christian faith of early Spanish and French

settlers, particularly in our Southwest. Sangre de Cristo Range in New Mexico means "Blood of Christ"; Corpus Christi in Texas is "Body of Christ"; Santa Cruz and Santa Fe mean "Holy Cross" and "Holy Faith." The original name of Los Angeles, bestowed in 1781 was El Pueblo de Nuestra Señora la Reina de los Angeles de Porciúncula," "The Village of Our Lady the Queen of the Angels of Little Portion."

The names bestowed upon inhabitants of various localities often reflect foreign or dialectal origin. The correct name for a citizen of Los Angeles, for instance, is Angeleño, which is pure Spanish. A citizen of Monaco, the tiny principality whose capital is Monte Carlo, is a Monegasque, reflecting the local dialect. Other such names for inhabitants reflect cultured Latin forms of the place-name itself: the adjective for Oxford is Oxonian; for Exeter, Exonian or Exon; for Cambridge, Cantabrigian.

Gotham was previously described as "the hamlet of the Goths"; but what connection can the Goths have with New York, to which the name is so often applied? It was bestowed, it seems, in 1807 by Washington Irving, who knew the history of the original Gotham in England. In the days of King John, the inhabitants, having learned that the king was planning to establish a hunting-lodge near their village, and fearing high taxes and other nuisances, acted by preconceived plan in such a strange, nonsensical fashion that the king's messengers reported the spot unsuitable. Gotham since then assumed the meaning of a town with method to its madness or, as we might say in New York, a "city of wise guys."

The Story of Personal and Family Names

The myrtle that grows among thorns is a myrtle still.—Talmud

What are names but air?—Coleridge

Names are the badge of individuality. So long as the individual is nameless, he is amorphous. When he receives or creates a name by which he can identify himself, he enters upon a truly subjective existence. By acquiring the names of objects, animals and people around him, he acquires also an objective consciousness.

The distinction between proper and common nouns, or names, is largely a product of civilized thought. More primitive is the distinction between animate and inanimate objects, a distinction which still forms part of the grammatical structure of many languages.

Little if any distinction must have been made at first between human beings and animals. The free interchange of names between the two animate classes is characteristic of most primitive groups. "Little Bear" is a perfectly sound primitive name for an individual. But "bear" itself is originally the "brown one" or, if we take it in its more common Indo-European variant typified by Latin *ursus,* it is the "harmer" or "bruiser." Such names could serve equally well for animals or people. Once they became regularly associated with animals, they could easily be transferred to people by reason of a real or fancied resemblance, or the desire for resemblance.

The single name is found associated, even in many primitive groups, with a tribal or clan-name, often with a nickname or honor-name as well. There is little doubt that this piling-up of names is an outgrowth of social living. Among the Mohawks, for instance, we find the existence of a birth-name like Morning Cloud, a confirmation-name like Hungry Wolf, an honor-name like Scalp-Raiser, and the

tribal name, Mohawk. The ancient Romans bore a personal name like Marcus, a hereditary family- or clan-name, such as Tullius ("of the Tullian clan"), and a personal nickname, such as Cicero ("chick-pea"), from a wart on the nose. This nickname, however, often became hereditary.

Among many primitive tribes personal names are not divided into male and female, and the same name can be indifferently applied to a man or a woman. A similar tendency is noticeable in present-day America, where names like Lee, Beverly, and even Marion and Pearl are used for people of both sexes.

The Christian, and particularly the Roman Catholic tradition, calls for first names which are taken either from the Bible or from the Saints' calendar. Some European countries actually used to limit by law the possibility of first names to these two categories, to which they later grudgingly added the personages of antiquity. The custom of using Saints' names in baptism, however, did not come into full vogue until the tenth century. During the four preceding centuries, there was a vogue of Germanic proper names in the countries penetrated by Germanic invaders after the fall of the Roman Empire. The documents of those centuries are replete with names like Chioberga, Childeberchthus, Bertegisilus, Helmegaudus in France; Adaloald, Wolfrit, Liutprand, Theodelinda in Italy; and Argemundus, Eggisenda, Ermenegildus, Lovesindus in Spain. Some of these survive to the present day in modified form, after having been sanctified by being used by a Saint. Their pagan, often totemistic origin, however, is clearly perceptible. Germanic names like Adolph and Rudolph mean "noble wolf" and "famous wolf"; Bernard is "bold as a bear," Eberhard, "bold as a boar." The Latin name Lupus ("wolf") which became extremely common in those centuries and which survives today in place-names like Saint-Lô ("saint wolf"), was probably a loan-translation from the Germanic. But the Romans themselves had previously used such totemistic animal names as Ursus and Leo.

A Germanic suffix that acquired and still holds great vogue is -bert, etymologically related to the English adjective "bright." Albert is "bright in honor," Robert (or Ruppert or Rupprecht) "fame-bright," Lambert "land-bright." The pure root appears in the feminine Bertha, whose exact Latin counterpart is Clara ("bright").

Ludwig, Lewis, Louis are all variants of an originally Germanic name meaning "bold warrior." Chlodovechus is the form the name assumes in the Latin documents of Gaul after the Frankish occupation, and Clovis, the first Merovingian king of France, is simply the namesake of his remote Capetian successor, Louis XVI.

The process of name-forming does not vary its pattern greatly from language to language. Latin Valentine is simply "valiant," Latin Agnes (or its Spanish descendant Inez) is "lamb-like." Greek Napoleon is "forest lion," Greek Philip "horse-lover." Celtic Arthur is "noble," Celtic Owen is "young warrior." Persian Cyrus is "sun," Persian Esther "star."

Hebrew names are often distinguished by a religious note which is largely absent from those of other origins. The -el appearing in such Hebrew forms as Emanuel, Gabriel, Michael means "God" or "of God." Daniel, for instance, "is the judge of God."

Jesus is a Greek rendering of the Hebrew Joshua, "savior." The use of Jesus as a first name for men, without the least trace of irreverence, is widespread in Latin-American countries.

Unfamiliar and strange are the forms which some very common names assume in different languages. John is easily recognizable in French Jean, Spanish Juan, German Johannes (Johnny is Hans or Hansel), even in Italian Giovanni, Russian Ivan and Serbian Jovan; but Irish Sean and Finnish Juhana require a translation. Joseph causes no trouble in its Spanish, German and Slavic variants, José, Josef and Josip; but it becomes more difficult in Italian Giuseppe and practically unrecognizable in Irish Seosmh. Stephen, a Greek name meaning "victor's wreath," becomes Etienne, Estéban, Stepan, Istvan and Stiobhan in French, Spanish, Russian, Hungarian and Irish, respectively. Few people would recognize the familiar Helen in the Hungarian Ilona or its diminutive Ilka.

Names peculiarly lend themselves to distorted, shortened or diminutive forms, many of which become so unrecognizable as to cause confusion. Ted, which in America serves for Theodore, is Britain's diminutive for Edward, along with Ned. Ed can stand for any of the names beginning with a prefix which in Anglo-Saxon meant "wealth" (Edmund, Edgar, Edwin, etc.). Mandy is a short form of Latin Amanda ("lovable," "love-worthy"). Mamie, which many think a

diminutive, is a full name, taken from Old French *m'amie* ("my lady-friend") or *m'aimée* ("my beloved"). Tabby, so often applied to she-cats, was originally the Syriac Tabitha ("gazelle"). Similar situations arise in other languages. Spanish José becomes Pepe or Pepito, Italian Giuseppe turns into Beppe or Peppino, and an apparently harmless Italian name like Dino may conceal a much more impressive Aldobrandino, Germanic in origin, meaning "old brand" or "old sword," with a diminutive ending which is practically all that survives.

A few names are unflattering to their owners. Among these are Calvin (Latin, "bald"), Claude (Latin, "lame"), Ulysses (Greek, "hater"), Priscilla (Latin, "somewhat old"), Mary (Hebrew, "bitter"), Barbara (Greek, "foreign"). Ursula ("little she-bear") is a matter of taste. So also are George (Greek, "farmer") and Algernon (Old French, "bewhiskered").

Many of the names bestowed by the Pilgrim Fathers upon their offspring strike a humorous note today. Among them we find such gems as Humility, Hate-Evil and Kill-Sin.

Another humorous note is supplied by those feminine names of recent American adoption which are taken from foreign languages (usually Italian or Spanish) without regard for their meaning in their tongues of origin. Lana is "wool" in Latin, Spanish or Italian. Donna is Italian for "woman," but may pass muster because of its secondary meaning of "lady." Gretta, supposedly an improvement on an original German Grete, becomes Italian for "mean," "petty." Mona is Spanish for "she-monkey," but also has a slang meaning "cute." Unforgivable are Buffa and Natica. The first is Italian for "funny," the latter for "buttock."

Mencken, in his second *Supplement*, offers a remarkable list of girls' names spreading from Oklahoma to Texas and the deep South, among them Alapluma, Vaughncille, Wymola, Xmay and Zzelle. One masculine name, reported from Kentucky, which seems to have escaped his notice is Tootall; its fortunate possessor actually grew to the stature of six and a half feet. The dwellers of the Amazon valley, about two decades ago, became fascinated by Frigidaire, with the result that many girls in that area bear that name. In Nyassaland, Africa, a native tribe got into the custom of taking names from a publisher's catalogue which

had somehow fallen into their hands. Their chieftain took for himself the sonorous name of Oxford University Press.

The custom of family names, as distinguished from the primitive clan or tribal name, which fell into disuse after the fall of the Roman Empire, did not generally arise in Europe till the twelfth century, when Venetian patrician families began to hand down a second name from father to son. Previously, there had been a sporadic use of patronymics, like Walter, John's son, which ultimately developed into Walter Johnson; of trade-names, like John the Baker, which resulted in John Baker; and of location-names, such as Thomas-at-well, which finally became Thomas Atwell. Along with these came nicknames, like Long John, later transposed into John Long. Confusion over the use of such names lasted for centuries and still endures today in a few localities, notably Iceland, where a son assumes his father's first name with the added suffix -son; thus Olaf the son of Gudman Thorwaldsson becomes Olaf Gudmansson, but Olaf's son Erik is Erik Olafsson. A similar system has been in use since time immemorial among Semitic speakers; in Arabic countries Abdul ibn Hussein is Abdul son of Hussein, and among non-westernized Jews Yakub ben Abraham is Jacob son of Abraham.

Crystallized patronymic forms supply us with perhaps a plurality of our family names: Nelson, Jones or Johnson, Williams, Harrison, Davis, etc. Almost equal in number are the petrified trade-names: Baker, Smith, Collier, Taylor, Butler, etc. Location-names like London, Berlin, Woods, Craig, Downs are only slightly less numerous.

Identical processes in name-forming have occurred in most western languages. A name like Smith has an exact counterpart in French Ferrier, Spanish Herrero, Italian Ferraro, German Schmidt, Dutch Smit, Hungarian Kovacs, Polish Kowalczyk, even Syrian Haddad. Russian Kusnetzov, however, is more literally Smithson. Jones and Johnson are paralleled by Italian Di Giovanni, Spanish Juánez, Norwegian Hanssen, Russian Ivanov. Woods has a counterpart in French Dubois, Italian Bosco, Spanish Madera, German Walde. Atwell is translated by French La Fontaine.

Smith, the most common family name in both Britain and America, has a three-to-two lead over its nearest competitor, Jones or Johnson. In Russia the situation is reversed. Ivanov holds a three-to-one lead

over Kusnetzov. On a par with the widespread use of Smith in the Anglo-Saxon countries is that of Chen as a family name in China.

Among the patronymics must be reckoned the numerous Celtic forms in O', Mc, Mac, Ap, P, and the Norman-French Fitz. Mc (or Mac) and Ap are respectively the Gaelic and Welsh forms of "son," while Fitz is the Anglo-Norman variant of French *fils*. McHugh, Aphugh (or Pugh) and Fitzhugh are therefore the same name, which might be anglicized into Hughson.

Not all family names, of course, belong to the three classes mentioned above (patronymics, trade-names, location-names). Some describe a personal characteristic or habit of some long-forgotten ancestor. Drinkwater (or French Boileau or Italian Bevilacqua) is a reminder of teetotaling tendencies somewhere along the line. White (French Leblanc, Italian Bianchi, German Weiss, Russian Byelov, Welsh Gwynne) was first applied to some member of the family who was unusually fair, or prematurely gray. The name of the Czech composer Smetana means "cream"; Gorky is "bitter"; Tolstoi is "fat"; Colombo (Columbus) is "pigeon"; Machiavelli is "bad nails"; Bonaparte is "on the right side."

Endings and prefixes in family names are often indicative of national origin. The suffix *-ian* (Kalenderian, Bagramian) is Armenian; *-quist, -rup, -holm, -strom, -dahl, -gren* and *-sen* (Lindquist, Northrup, Lindholm, Bergstrom, Liliedahl, Kilgren, Johannsen) are Scandinavian; *-ez* (Pérez) is Spanish; *-berg, -burg, -stein, -sohn* are German, Scandinavian, or Yiddish; *-ich* or *-ić* (Karageorgeovitch, Adamić) is Yugoslav; *-yi* (Perenyi) is Hungarian; *-poulos* (Stavropoulos) is Greek; *-oglu* (Yegenoglu) is Turkish; *-i* (Petri) is Italian; *-off* or *-ov* (Molotov, Rachmaninoff) is Russian; *-eff* or *-ev* (Andreiev, Gheorghieff) is Russian or Bulgarian; *-enko* (Kravchenko) is Ukrainian; *-wicz* (Sienkiewicz) is Polish; *-ski* (Paderewski) is Polish, but its variant *-sky* (Kerensky, Radetsky) is Russian or Czech.

Among the prefixes, *van* (Van Houten) is Dutch or Flemish; *von* (Von Hindenburg) is German; *de* may be French, Spanish, Portuguese or Italian (de Musset, de Avila, de Vasconcellos, de Amicis); *di* and *da* are Italian (di Parma, da Feltre). The French *de* may appear in such variants as *du, de la, des* (Duhamel, de la Falaise, Desgranges); the Spanish variants are *del, de los, de las* (del Río, de los Ríos); the

Portuguese are *do, da, dos, das* (Davega, dos Passos); Italian variants are too numerous to mention (del Giudice, delle Colonne, etc.). These prefixes do not necessarily betoken aristocratic lineage.

Not all languages give names the same arrangement. A Russian name consists of the given name, a real patronymic, ending in *-vich* or *-ich* for men, *-vna* for women, and a family name, usually ending in *-ov* or *-ev*, which is a petrified patronymic and turns to *-ova, -eva* in the feminine: thus, Ivan Nikolaievich Semyonov (John, son of Nicholas, of the Simons) or Olga Nikolaievna Semyonova (Olga, daughter of Nicholas, of the Simons).

It is perfectly polite and proper to address a Russian by his or her given name and patronymic (Ivan Nikolaievich, Olga Nikolaievna), omitting the family name, just as it is perfectly polite and proper to address a Spaniard by his or her first name, prefixing *Don* or *Doña* (Don Manuel, Doña Inez), and omitting the family name.

The Burmese use prefixes before their names; a young woman has the prefix *ma,* which changes to *daw* when she grows older; young men carry the prefix *maung,* while older men have *u,* literally "uncle"; thus, "Ma Thein," later "Daw Thein," and "Maung Ba," later "U Ba."

In many Catholic countries three first names are given at christening, one by the father, one by the sponsor and a third by the priest. Despite this, the use of a middle name in later life is far less customary than it is in America. The "Jr." so common in the United States is practically non-existent elsewhere, and a Budapest newspaper recently voiced an inquiry by one of its readers as to why so many Americans append Jr. to their names and whether the suffix has any historical significance.

Spanish-speaking countries often combine the paternal and maternal family names (Menéndez y Pelayo, Rico y Fraga). In many lands, notably Hungary, China and Japan, it is customary to place the family name before the personal name at all times and not merely on index-cards: Chiang Kai-shek is Kai-shek of the Chiang family.

The alias which in most social groups is slightly questionable is an accepted social custom among the Gypsies, who use a *nav romanes* (Romany name) for use among their own people, and a *nav gajikanes* (foreign name) for use among non-Gypsies.

The Language of Politeness

Intimately connected with names, and to some extent arising from them, are the superabundant titles and expressions which social living has forced practically all races to subscribe to. The "Mr.," "Mrs." and "Miss" of English, the *Monsieur, Madame* and *Mademoiselle* of French, the *Herr* and *Frau* of German, and all the other myriad prefixes for proper names have a long and interesting history.

"Mister" is originally the Latin *magister,* "headman," "commander," "steersman" (the root is *mag-,* "great"). The educational, intellectual or occupational headman becomes the "master," the *maître, maestro* and *mastro* of the Romance languages, even the *Meister* of German. Socially, he turns into a person who is respected because of his prominent position. "Mistress" is the same word, to which is added a Greek feminine suffix *-issa,* which in French becomes *-esse.* "Miss," an abbreviation of "Mistress," was used under Charles I to denote a woman of ill-repute, but later began to be applied to an unmarried woman, with the spelling "Mis." In Shakespeare's days, "Mistress" was used for both married and unmarried ladies, and feminists, who object to the distinction between Mrs. and Miss and its concomitant revelatory features, have often proposed that the two present-day titles be merged into a single one, "Miss" (to be written "Ms."), with a plural "Misses" (written "Mss."), even at the cost of confusion with the abbreviation for "manuscripts."

The rise and fall in the fortune of words is illustrated by the fact that, after attaining the comparatively high estate which it still retains in America, Mr. in Britain has fallen to the point where it is not good

form to use it in addressing a letter to an equal. (Mr. indicates a social inferior or a tradesman.)

The proper British gentlemanly form of postal address is "So-and-so, Esquire." "Esquire" comes from Latin *scutarius*, ("shield-bearer"). The shield-bearer or *écuyer* was in medieval days a young man of noble birth who had not yet won his knight's spurs and still served his apprenticeship. The use of "Esquire" to a distinguished correspondent is, from the etymological point of view, somewhat condescending.

Madame and *Mademoiselle* are highly appropriate. The former comes from Latin *mea domina*, ("my lady"), and the latter is a diminutive or youthful form (*-ella* was a Latin feminine diminutive ending). On the contrary, Spanish *Señora, Señorita* and Italian *Signora, Signorina* contain an implicit charge of old age. The base form is the Latin masculine *senior*, ("elder," "older"), from which Spanish *Señor*, Italian *Signore*, French *(Mon)sieur* and *Seigneur* and English "Sir," "Sire" are derived. As applied to a man, the appellation "elder" is a token of respect; as applied to a woman, the compliment is somewhat dubious; when it comes to a young unmarried woman, it is downright paradoxical, since it makes her a "little old woman."

German *Herr* is "Lord," in the most comprehensive sense of the word. *Frau*, on the other hand, is simply "woman." In this polite usage of "woman," German is paralleled by Italian *donna*, applied to a lady of high estate, and by English "queen," which originally simply meant "woman." German *Fräulein* is "little woman."

Pre-Soviet Russia used *gospodin* and *gospozha*, both based on the Indo-European word that gives us "guest" and "host." But since the 1917 Revolution it is no longer stylish, and may even be unsafe, to use these words. "Comrade," "Citizen" and "Citizeness" are preferred. The French Revolution tried to introduce similar words at the end of the eighteenth century, but the French were far too fond of their polite appellations to give them up permanently.

Japanese *sama* and *san* have the same general value as our "Mr.," "Mrs.," "Miss," but without the distinction of gender and married status. Suzuki San can normally be used for Mr., Mrs. or Miss Suzuki.

Few languages lack respectful titles. Papuan uses *taubada*, India has *sahib*, the Dutch East Indies have *tuan*, the Near East *effendi*. South Africa has *bwana* and *baas*, from which we have acquired our

"boss." The Burmese term is *tha-kin,* but recently a revolutionary society, tired of social inequality, boldly assumed the name of "Tha-Kin Society," and its members proceeded to prefix *tha-kin* to their own names, thereby removing from it all significance. It is probable that the Burmese situation will eventually parallel that of western countries, where no particular social significance is now attached to terms like "Mister" and *Monsieur.*

While most languages use titles of politeness, there is infinite diversity in usage. Some foreign languages are far more prolix than English in their use of honorific titles in correspondence. A German letter, for instance, is addressed to *"Hochwohlgeboren Herrn Professor So-und-so"* (literally, "High-well-born Mr. Professor") and starts: *"Sehr verehrter Herr Professor!"* ("Greatly honored Mr. Professor"). By way of contrast, there is a tendency in French to eschew all titles save *Monsieur, Madame* and *Mademoiselle* in direct conversational address, and a society was formed at the University of Virginia in 1925 "for the encouragement of the use of 'Mr.' as applied to all men, professional or otherwise."

Some languages carry the husband's title over to the wife. *Frau Professor* in German is used not to a lady professor, but to a professor's wife. Again, in Italian a title like "Professor" is used in connection with anybody holding any teaching position beyond elementary school, or to an orchestra player.

Conventional formulas for "I" and "you" abound in many languages. English is the only language that capitalizes "I" in writing, whereas many languages capitalize "you," and this has been interpreted, rightly or wrongly, as a sign of an exaggerated ego on the part of English speakers. A few languages, including Siamese and Hungarian (the latter only in flowery speech) use "slave" for "I." The Hungarian term is *szervusz,* taken from Latin *servus,* the word that gives us "serf," "servant" and "servitude." "Your humble servant" in English is not too far removed. Malay uses *sahaya* or *patek* ("slave") when addressing a superior; *tean* ("companion") in addressing an equal.

In most languages there are at least two forms for "you," one more familiar, the other more polite. Often the plural form of "you" serves also as a polite singular. The English use of "ye" and "you," originally

plural forms, to replace "thou" and "thee" in the singular, has led to the practical extinction of the latter.

The rising of the polite plural for the singular has a curious historical origin, if we are to believe the more picturesque of the two theories on the subject. The less picturesque is that "you" for "thou" arose by imitation of editorial "we" for "I," a current practice in the ancient world. Cicero tells the Romans, "We have saved you from Catiline," when it is fairly obvious that he means "I have saved you." But editorial "we" is essentially a plural of modesty, while "you" for "thou" is a plural of majesty, and it is difficult to see how the one could arise from the other.

The second theory is that the use of "you" for "thou" arose in the later days of the Roman Empire, when there were two Emperors, one sitting in Rome, the other in Constantinople. Persons addressing one of the Emperors would use "you" on the theory that they were addressing the totality of imperial authority. Later, when the Empire had fallen, barbarian chieftains demanded imperial honors for themselves, including the "plural of majesty." Ultimately, every petty official required the honorific form of address which, by reason of too frequent use, gradually lost some of its effectiveness. At this point, new devices began to come into being for use with those whom one really wished to honor. Spanish, for example, evolved a *Vuestra Merced* ("Your Grace" or "Your Honor") which ultimately contracted into *Usted*. Grammatical logic, however, required the verb to be in the third, not in the second person (in English we say to a judge: "Your Honor *is* mistaken"). *Usted* is consequently construed with a third person singular verb.

Italian went further than Spanish. After developing such forms as *Vostra Signoria* ("Your Lordship") and *Vostra Eccellenza* ("Your Excellency"), it went on to replace them with a short pronoun. But since "Lordship" and "Excellency" are feminine nouns in Italian, it was the feminine pronoun *lei* ("she") that was used to replace them. Accordingly, the form "she," duly capitalized in writing, is used in Italian with a third person singular verb as a polite "you" (*Lei scrive,* literally, "she writes," for "you write"). The Fascist Government, during the years of its existence, tried, but quite unsuccessfully, to abolish "she" and bring back the earlier "you." "You" appeared in office,

commercial and even private correspondence, but "she" continued to be used in conversation.

Portuguese and Polish have a polite usage which is reminiscent of Congressional practice. Instead of saying "you" one uses "the gentleman," "the lady."

French, which uses a simple "you" for polite purposes, has a special expression, *tutoyer,* which means "to thou-and-thee" somebody, to address familiarly instead of politely. There was an abortive tendency to *tutoyer* during the French Revolution, but Robespierre viewed it with disfavor, and even spoke in approval of the generalization of "you." A French revolutionary writer described the habit of using the familiar form of address as "characteristic of absolute monarchies."

There is considerable embarrassment in languages that use a polite and a familiar form of address about passing from the former to the latter when a change in the nature of the relationship between two persons warrants it. Hesitation, confusion, relapses and apologies are the result before the new form of address becomes stabilized. It has been claimed that the English equivalent of the French transition from *vous* to *tu* is the passing from "Mr. So-and-so" to the use of the person's last name, then to the use of his first name; but it is not quite the same thing. One can always avoid pronouncing a name, but it is not easy to avoid "you."

Polite expressions are often instructive as to origin, meaning, or both. Our own "thank" is akin to "think," and German *danken* to *denken.* One directs one's thought with gratitude toward the person one thanks.

The Latin expression for "to give thanks" was *gratias agere.* The *gratias* survives today in Spanish *gracias* and Italian *grazie,* both related to "grace" and "gratis," which in Latin means "for thanks" and nothing more. French *merci,* on the other hand, comes from Latin *merces* ("reward"), which is connected with "merchant" and "commerce," and reveals a material turn of mind.

There are two Russian expressions for "thank you," both highly unsuited to an atheistic society. *Spasibo* is *spasi Bog* ("God save"), while *blagodaryu Vas* is "I bless you." The Japanese "thanks," *arigatō,* literally means "it is difficult," referring to the hardship encountered in your service by the one you thank, or possibly to the difficulty of

appropriately thanking him. A more polite Japanese expression of gratitude, *makoto ni go shinsetsu de gozaimas'*, literally means "in truth, an august, special, lordly amiability is here honorably placed."

For "you're welcome" or "don't mention it," German says "pretty please"; Italian says "nothing," or "I beg." French, Spanish and Portuguese say "there is not whereof," with "to speak" understood. Russian says "not for that." Chinese says "no have guest spirit."

Equally curious are formulas of greeting and leave-taking. Our "hello" is in the original Anglo-Saxon "be whole" or "be healthy." We use it in opening a telephone conversation, and so do many other tongues which have borrowed it from us. German, however, also uses "Here Mr. So-and-so." The British and Portuguese use "Are you there?" Spanish says "What is it?" or "At the phone." Italian says "Ready!" Russian says "I'm listening." Japanese says "If, if," the implication being "by all means speak up, if it so pleases you."

The Japanese do not say "good morning," "good evening," but simply "it is morning," "it is evening." The Russians say "be healthy." The Chinese use "morning peace," "evening peace." "Peace be with you" is the beautiful salutation of the Semitic languages, to which the equally beautiful reply is "And unto you be peace."

"Good-bye" is originally "God be with you." The Romance languages say "to God"; the Slavic languages, "with God"; while Japanese *sayōnara* is literally "if it must be so." "So long" was first imported into Britain by soldiers who had been stationed in Malay-speaking countries. The Malay salutation, *salang,* is a corruption of the Arabic *salaam* ("peace").

"Glad to meet you" is in polite Japanese "for the first time I have the honor to hang from your eye," while a peculiar Arabic form of greeting used on entering a house is "Cover up!," a warning to the women of the household that they must veil their faces.

The custom of saying "God bless you" when a person sneezes is said to have originated in the sixth century under Pope Gregory the Great, when an infectious malady of which sneezing was a symptom raged in Italy. The Hindustani variant is "Live!" to which the appropriate reply is "With you!"

Sayō de gozaimas' is a Japanese polite formula of general agreement with what has been said by your interlocutor. It is regularly over-

worked by Americans in Japan, as illustrated by the case of a man who had been entertained at dinner by a Japanese family. As he was taking his leave, the hostess launched into the customary polite disquisition on what a wretched meal had been offered to so exalted a guest. The American, not being too familiar with the language, used the magic formula, which in this case could be roughly translated by "It sure was!"

THE HISTORY OF WRITING

The palest ink is better than the most retentive memory.—Chinese proverb

Language is a completely arbitrary symbol of thought. Writing is a symbol of the spoken language, less arbitrary than the language itself, since in most systems of writing there is an attempt to make characters correspond to sounds. A system of writing is a symbol of a symbol, just as a check is symbolical of paper money, which is in turn symbolical of gold.

The symbolic character of writing has been partly lost sight of in the most advanced systems, which strive to make characters correspond to spoken sounds, while it stands out most starkly in the more primitive systems, where the spoken-tongue intermediary is omitted, and the character is symbolical not of a sound, but of a thought-concept.

When a written form is achieved, the result is generally greater stability in the spoken tongue. Many languages of primitive groups are unwritten and consequently highly fluctuating, with many dialects, a rapid rate of change, and an undetermined standard form. Similar high variability in the spoken language is to be observed in tongues like Chinese, in which the written symbol for the thought rather than for the sound still persists. An ideographic system of writing places little restraint upon the spoken language. A phonetic system constricts the spoken tongue into a mold, forces the speakers, to a certain extent, to follow the traditional pronunciation, as indicated in the equally traditional orthography, rather than their own whimsical bent, and gives rise to "correct" and "incorrect" forms of speech which, were the spoken language unrestrained by a written form, would be equally "correct" variants or, at the most, conservative or innovating forms.

Many peoples believe their language or system of writing to be of divine origin. The name of the Sanskrit alphabet is "Devanagari," which means "pertaining to the city of the gods." "Hieroglyphic," used by the ancient Egyptians for their formal documents, carved in stone, means "sacred stone writing" (the Egyptians also had the hieratic and demotic scripts, more generally used on papyrus). They believed that writing had been devised by Thoth, god of wisdom, and the Egyptian name for writing was *ndw-ntr* ("the speech of the gods"). The Assyrians had a legend to the effect that the cuneiform characters were given to man by the god Nebo, who held sway over human destiny. Cuneiform was produced by pressing wedges into wet clay tablets (the name means "wedge-shaped"); it was used by the Sumerians, Assyrians, Babylonians, Persians and other peoples of the Mesopotamian region from about 4000 b.c. to the time of Christ. The Mayas attributed writing to their most important deity, Itzamna. The lost prehistoric writing of Japan was styled *ḳami no moji* or "divine characters."

Primitive systems of writing like the Egyptian and Assyro-Babylonian, as well as the present-day Chinese, were originally based on pictorial representation pure and simple, like the systems also developed by still more primitive groups like the American Indians and the Australian natives. A pictograph is a symbol denoting a definite object, like a fish or tree or man. Sumerians, Egyptians and Chinese alike, when they wanted to indicate in permanent pictorial form the concept of "sun" or "moon," merely drew a picture of the sun or moon. These pictures became conventionalized in different ways, depending partly on the nature of the writing materials, partly on the bent of the individual races.

But the number of picturable objects is definitely limited, and far outstripped by both thought-concepts and spoken-language words. As soon as they became aware of the shortcomings of their pictographs, the devisers of early writing ingeniously developed ideographs, which are symbols of non-picturable things, actions and ideas. The Chinese, for instance, combined their pictographs for "sun" and "tree" into an ideograph signifying "east" (the sun rising through the trees). "Sun" and "moon" were put together to form "light"; "eye" and "water" to form "tear"; "woman" plus "child" gave "good." The process could go, and went, much further. Two or more ideographs, once contrived

out of pictographs, could be combined to denote still more complicated or abstract concepts: "green" and "year," themselves ideographs originally contrived out of earlier pictographs, mean "youth"; and "faith" plus "piety" plus "temperance" plus "justice," all ideographs, represent "virtue."

There is one great advantage in a pictographic-ideographic system of writing. No matter how much individual users may diverge in their speech, all will be able to understand one another's written messages. We of the west, who have preserved a certain number of ideographic symbols, know that "$10" will be universally understood by all who are literate in any language, whether they pronounce it "ten dollars," "dix dollars" or "diez dólares." NaCl means the same to the Italian chemist, who says *cloruro di sodio,* and to the American, who says "sodium chloride." Today, in China, people speaking mutually unintelligible dialects are able to read one another's writing with no difficulty whatever. The spoken word for "man" may vary widely, according to the dialect; but the written symbol for "man" is the same throughout the vast Middle Kingdom.

To judge from what happened in the west, however, the disadvantages of such a system must have outweighed the advantages. Sumerians, Assyro-Babylonians and Egyptians, having started with a pictographic-ideographic system, soon began to isolate certain characters and give them a phonetic value. The Egyptian symbol for "sun" was a picture of the sun. The spoken Egyptian word for "sun" was *re.* The sun-picture is often found in hieroglyphic inscriptions standing not for "sun," but for the spoken syllable *re* occurring in a longer word.

It remained for the Phoenicians and Hebrews finally to use their symbols with the exclusively phonetic value of single syllables or consonants, dropping the ideographic connotation altogether. At this point, we have the beginning of a true phonetic alphabet.

Curiously, however, the very word "alphabet" betrays its pictographic origin. It is the Greek version of Semitic *aleph, beth,* the first two letters of the early Semitic alphabet. *Aleph* means "ox," and the letter which ultimately developed into our *A* was at first a picture of the head of an ox. *Beth* is Semitic for "house," and the original *B* was the picture of a house. All the letters of the Semitic alphabet have similar pictographic connotations.

Once the system of using symbols to represent sounds rather than objects or ideas became established, it spread with relative rapidity. The Greek legend says that Cadmus of Thebes first brought the alphabet from Phoenicia to Greece about 1500 B.C. The Greek alphabet, derived from the Phoenician, gave rise to the Etruscan, which in turn gave rise to the Roman, in use among western nations today.

Another variant of the Greek alphabet was adapted for the use of the Goths by their bishop Wulfila in the fourth century, but it fell into disuse when the Goths were absorbed into the Roman Empire of the west. Still another version of the Greek alphabet was devised by two bishops from Constantinople, Cyril and Methodius, for the Slavs to whom they brought Christianity in the ninth century. Faced with Slavic sounds which did not exist in Greek, they stretched the Greek alphabet as far as it would go, then drafted one or two Hebrew characters and invented others. The result was the Cyrillic alphabet used today by those Slavic nations which followed the Eastern Church—Russians, Ukrainians, Serbs and Bulgars. The Poles, Czechs, Slovaks, Croats and Slovenes, who accepted the western version of Christianity, adopted the western Roman alphabet.

The Roman alphabet had a long and intricate development. Written at first exclusively in the characters which today appear in our printed capitals (A, B, C, D, etc.), it was soon modified for purposes of more rapid writing. The ultimate result was the large variety of printed and hand-scripts in use today. Variants of the Roman alphabet are the graceful characters of Irish and the German Gothic, or Black Letter alphabet, first developed around the twelfth century from the earlier Carolingian script, used by scribes at the court of Charlemagne and his successors. Black Letter was used in English till the sixteenth century, when it was replaced by the plainer Roman. It continued to be used in the Scandinavian countries till the nineteenth century, and still appears in present-day German.

The parent Semitic alphabet of the Phoenicians and Hebrews had, however, a far larger number of descendants than the Greek, Roman, Cyrillic and Gothic of the west. Spreading southward and eastward, it gave rise to the beautiful Arabic alphabet which, like the Hebrew, consists exclusively of consonants. Vowel-values are indicated in Arabic by dots and dashes above or below the line, in Hebrew by vowel-points

usually beneath the consonant. Both scripts frequently omit the vowel-symbols altogether, leaving it to the intelligence of the reader to supply the vowels. This works out as if we were to spell "heart" HRT; there might be confusion with "hurt," but in a context this danger would be minimized. In addition, the consonants of the Arabic alphabet regularly assume four different forms, according as they are initial, medial or final in the word, or stand by themselves.

Just as the alphabet of the Romans was adopted by such diverse nations as the English, Irish, Czechs and Swedes, so likewise the Arabic alphabet spread with the Koran to an infinite number of races and languages. The Fula, Hausa and Swahili of central Africa, the Malay, Javanese and Sundanese of the Dutch East Indies, the Moro of the Philippines, the Urdu and Punjabi of India, the Persian of Iran, and several of the Turkic languages of the Soviet Union in Asia use some form or other of the Arabic alphabet.

It is perhaps worth while noting at this point that Hebrew and Arabic are read from right to left. The left-to-right reading arrangement of the west arose through a strange intermediary. The earliest Greek, appearing in Homeric times, has an arrangement called *boustrophedon,* or "as the ox plows": left to right, then, for the next line, right to left, then left to right again. Why this system, so restful for the eye, was not permanently adopted is one of the unsolved mysteries of language.

Other developments of the original Semitic alphabet appear in the Armenian alphabet and in the ancient Devanagari of India, in which Sanskrit is written. From the Devanagari stem practically all the myriad scripts of India, Burma and Thailand. But in the case of many of them we have to note a regression. The Semitic symbols are consonants, with the vowels either separately indicated or left to the understanding of the reader. Many of the alphabets of India and southeastern Asia turned a single consonant into a large number of symbols, each of which carries the consonant-value plus a separate vowel-value, and since the number of possible vowel-values in some of these tongues is large, this multiplies the symbols to the point where they become unmanageable and difficult to learn. Tamil, the leading Dravidian language of southern India, has a syllabic script of 312 char-

acters, while other languages of India range up to 500 and 700 char-
acters.

The major civilized languages of the earth may thus be said to have
two main systems of writing, drawn from separate sources: the Chinese
picto-ideographic, which also serves Japan; and the Semitic phonetic
alphabet, derived from an Egyptian hieroglyphic which was also origi-
nally of a pictographic nature. The Chinese system has remained static.
The Egyptian-Semitic-Western system has proved its dynamism and
power of adaptation.

Japan received the Chinese system of writing along with Chinese
literature about A.D. 300. The Japanese use the same symbols as the
Chinese, but since the spoken languages are totally different, the sym-
bols are differently read; the symbol for "man," for instance, pro-
nounced *jên* in Chinese, reads *hito* in Japanese.

The Japanese, however, like the ancient Egyptians, proceeded to
devise auxiliary syllabic alphabets by the simple process of taking cer-
tain Chinese ideographs and giving them not a meaning-value, but
a sound-value. There are two such syllabaries, the *hiragana* and the
katakana, each consisting of forty-eight syllabic characters. If either
syllabary is read completely through in the order given in Japanese, it
spells out a brief poem on the frailty of human affairs. The Japanese
make use of these syllabaries to represent case-endings and verb-end-
ings, which their language has and Chinese has not. They also use
them alongside of the ideograms, in much the same fashion that we
write "$10 (ten dollars)."

It seems strange that having progressed that far on the road to
complete phonetization, the Japanese did not proceed to discard the
Chinese ideograms altogether and further develop their syllabaries into
complete phonetic alphabets. They give as an excuse the fact that there
are in their language large numbers of homophones (words sounding
alike, but having different meanings), which in ideographic writing
are distinguished by completely different symbols, but which in
phonetic script would be indistinguishable. That this argument does
not hold too much water is indicated by words like our own "post,"
which is both pronounced and spelled the same way despite its wide
variety of meanings ("army post," "post this letter," "post a guard,"
"post a notice," "fence-post"). The Japanese, however, point to a word

like the spoken-language *kami,* which means "good taste," "hair of the head," "paper," "lord," "governor," "seasoning," "god" or "above." They even claim that their spoken-language word *ka* has 214 separate meanings, each indicated by a separate character.

Chinese and Japanese, when printed on a page, are read from top to bottom, with the vertical columns running from right to left, though other arrangements are possible.

Of all the phonetic alphabets in existence, the Roman is the most widespread, as well as the one providing the possibility of greatest simplicity. This possibility is not always fully exploited, as shown by the spelling difficulties of our own English. Under the circumstances, it is not surprising that movements tending to conversion from more complicated scripts to the Roman alphabet should have arisen in such widely separated countries as Turkey and Japan. The Turks, who had been using the Arabic alphabet since their adoption of Mohammedanism, turned to the Roman alphabet in 1928 under the guidance of their leader Mustapha Kemal Atatürk. The Japanese established a society for the use of the Roman alphabet as far back as 1885. Even the Chinese have of late thought of adopting the Roman alphabet for their tongue. The Russians modified their Cyrillic alphabet somewhat in the early days of Soviet rule, but since Cyrillic offers equal possibilities with Roman of symbol-for-sound correspondence, there is no great urgency upon them to turn to the west for a new script. Such urgency appears in the case of many languages of India and southeastern Asia, and missionaries, chief among them the Reverend Frank Laubach, have been hard at work devising phonetic systems of writing to replace the cumbersome, illiteracy-fostering scripts of the east.

The Roman alphabet is probably the best among historically developed devices for recording sounds. But it is far from perfect. The fact that it came into being to serve the linguistic needs of the Romans, but was later adopted by other nations with widely different speechhabits accounts for part of the trouble. An added feature of difficulty resides in the fact that language-sounds change, often rapidly and radically, while spelling tends to remain traditional. The result is that in a language like English, we of the twentieth century pronounce NAJT, but spell "knight." The spelling reflects not our present-day pronunciation, but that of our Anglo-Saxon forebears, to whom the

word was KNIKHT, with *k* fully pronounced, a short *i,* as in "pin,"
and a harsh guttural between the *i* and the *t.*

Spelling reform of languages like English and French, designed
to bring the written form in line with present-day pronunciation, is
often advocated, but, like Mark Twain's weather, no one ever does
anything about it. For this there are a few good reasons, in addition
to hidebound traditionalism. If we were to reform our spelling, all
our existing books would have to be scrapped and reprinted in the
new spelling (this argument, by the way, was also advanced by the
Japanese when some American educators suggested to them that they
get rid of their Chinese ideographs and syllabic characters, and use
Roman script instead). Also, a word like "nation," which is now easily
recognized in written form by French, Spanish, Portuguese, Italian,
German and even Russian speakers, would be far less recognizable if
spelled, more or less phonetically, NEJSHUN or something similar.

English makes use of no subsidiary characters, save for the apos-
trophe. Many other languages use accent-marks, umlauts, cedillas,
tildes, hooks and bars over vowels and consonants to indicate a modi-
fied pronunciation of the symbol in question. This is again due
either to the fact that the language has changed since the alphabet was
adopted, or that at the time of the adoption the language had sounds
that did not very well fit into the scheme of the Roman alphabet.

It is a curious fact that there is no language which has absolute
symbol-for-sound correspondence, though Finnish comes quite close,
using a single letter of the alphabet for each sound of the language,
and indicating a long vowel or consonant by writing it twice.

Phoneticians, who are concerned with language-sounds, have de-
vised an "International Phonetic Alphabet," consisting of some hun-
dreds of characters, designed to represent all the sounds occurring in
all known languages. But even phoneticians are occasionally pessimistic
about their labors, for there is practically no sound represented by the
same symbol in two different languages which absolutely coincides.
French and English, for instance, both use what looks in writing like
D, but the French sound is produced by pressing the tip of the tongue
against the back of the upper teeth, the English sound by touching
the tip of the tongue to the gums immediately back of the upper teeth
—a trifling difference, perhaps, but one that serves to distinguish a

native speaker from a foreigner trying to speak the language. As one phonetician puts it, "it is difficult, not to say impossible, to obtain an idea of speech from phonetic symbols." Another phonetician had previously stated that "it is almost impossible for one person to express to another by signs the sound of any word."

Perhaps the phonetic system of writing is not the acme of perfection after all. There is at least a talking-point in the arguments of those who advocate that we go back to the picto-ideographic system of our remote ancestors, or simply adopt the ideographic writing of the Chinese. At least all the peoples of the earth, regardless of their spoken tongues, would understand one another in writing.

THE CONSTITUENT ELEMENTS
OF LANGUAGE

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C H A P T E R   I

THE COMPARTMENTS OF LANGUAGE

Who climbs the grammar-tree, distinctly knows
Where noun and verb and participle grows.
—Dryden

To the question: "What is language?" many and varied answers
have been given. Some linguists, fastening upon the phonetic aspects
of speech, have defined language as being basically a series of sounds
produced by certain human organs and received by others. Another
school replies that since the main characteristic of language is mean-
ingfulness, and since a transfer of meaning can take place without the
medium of sound, as witnessed by semaphoric or gestural systems of
communication, the phonetic aspect of language is secondary to the
semantic feature.

To the grammarian, language is primarily a series of grammatical
forms, roots and endings. To the literary specialist, language is a series
of words so arranged as to produce a harmonious or logical effect. To
the lexicographer, language is fundamentally a list of words with their
separate derivations, histories and meanings. To the man in the street,
language is what he uses, quite unconsciously, to communicate with
his fellow-man.

Obviously, these partial definitions are all correct. But precisely
because they are *all* correct, the sum total of language amounts to
something greater than any one of them.

Sounds in themselves do not constitute language, yet the spoken
language consists of sounds. Meaningfulness may be achieved in a

number of non-linguistic ways, therefore meaningfulness alone does not constitute language; yet language, to be worthy of the name, must be meaningful. Grammatical forms and grammatical categories, taken by themselves, are dead things, as will be attested by many former students who "went through" Latin or French in certain educational institutions; yet language is characterized by their presence to the extent that there is no language, however primitive, that does not possess some system of grammar. Spoken and written language consists of separate words; but unless these words are arranged in certain sequences, they will not only fail to convey beauty or logic, but will even fail to convey complete meaning. Lastly, a language that does not serve as a medium of communication is a traitor to its function.

Let us for the moment fasten our attention upon the aspects of "language" which the name itself implies (tongue, speech). It is the spoken medium, with its written auxiliary, that serves to an overwhelming degree the communication needs of the human race.

This spoken-language machinery, developed and improved over countless centuries, consists of sounds, produced by the human vocal organs and received by the human auditory organs. In the case of the written counterpart of speech, the sounds are replaced by written symbols, which represent either the sounds themselves or the ideas that the sounds are intended to convey, and which are perceived by the visual organs.

This is the purely mechanical set-up of language. Obviously, the broad definition above must be restricted before a satisfactory description of language is achieved. The human vocal organs can, and often do, utter nonsense sounds which are received by the human ear, but convey no specific meaning. A pencil in a human hand is likewise capable of producing signs which will be seen by the human eye, but will carry no particular message.

It is only when the sounds are grouped into words, and the written signs into letters or significant symbols, that they begin to acquire the true character of language. The word is an arbitrary sequence of human voice-sounds which has gained general acceptance in a social group as conveying a certain concept, idea, or meaning. The word is meant to arouse in my hearer's mind a concept similar to that which I am endeavoring to express. Hence, the word is a fundamental part of

language. It consists of sounds, but the sounds must be arranged in a certain order and must, above all, convey a given meaning.

The word by itself is a very incomplete bearer of meaning. A word like "dog," uttered alone, begins to convey a message to my hearer, but unless I accompany it with other words or with gestures, all that my hearer will gather is that I have my mind occupied with a dog. On the other hand, when I say, "Look at the pretty little white dog running up the street," my hearer does not even have to follow my request to have in his mind a fairly complete picture of what I have in mine. Just as the sequence of sounds completes the word and gives rise to the beginning of an image, so the sequence of words completes the mental picture.

But while my language is now made adequate to complete my meaning, there is still another element involved. Had I said, "Look at the pretty little white *dogs* running up the street," my hearer would have obtained a somewhat modified picture. Here I have not added words or shifted their order. I have made a simple sound-modification in a single one of my words, adding a significant sound-and-meaning element whereby the message is transformed. My addition in this case is a grammatical or morphological element whereby I join the auxiliary notion of number to the fundamental notion of "dog." My language is now complete, since I have fully succeeded in transferring from my own mind to that of my hearer a complete and complex notion, through the instrumentality of my speech-organs, and of his organs of hearing. The transfer may as yet be imperfect, since I may have in mind poodles running up a broad street, and he may visualize the scene as involving terriers running up a narrow street. But the meaning may be further clarified by means of additional sounds, words, sentences and grammatical forms. The linguistic principle and method are established.

Four primary elements have entered my demonstration, plus one determining over-all concept and purpose. The latter is, of course, meaning and its transfer, to which the four elements are subservient. The elements are sounds, words, sentences, and grammatical forms, all of which are, to a greater or lesser degree, necessary to serve my ultimate purpose, language.

The transfer of meaning, in linguistic terminology, is semantics,

from Greek *semainō* ("to mean"). Without semantics there is no true language. Semantics may be served by speech, by writing, by gestures, by signs, by anything that conveys meaning, which means that semantics transcends the narrower etymological definition of language as "oral speech," though not the broader definition of language as "means of communication."

Sounds, produced and received by human organs, are indispensable in the spoken language, which accounts for the greater part by far of meaningful transfer. The investigation of spoken-language sounds forms the object of a large number of related fields of study (phonetics, phonology, phonemics, etc.), all of which have in common the element *phonē,* or sound.

The word, consisting of an orderly, conventional sequence of sounds, constitutes the minor unit of language. It may be placed under the heading of vocabulary or lexicology, primarily concerned with the meaning and use of words, or of etymology, which goes into the origin, development and history of individual words.

The sentence, consisting of an orderly sequence of words, constitutes the major unit of speech. Here the problems involved are placed under syntax (orderly arrangement) and style.

The grammatical forms, or variants of individual words, which serve to convey accessory notions of number, gender, time, mode of action, etc., form the morphological division of language (Greek *morphē* means "form" or "shape").

Each of these four primary divisions of language, as well as the all-embracing field of semantics, presents its own peculiar and fascinating problems, its own historical and geographical development, its own complex ramifications. As each one is taken up in detail, various questions will arise to trouble not only the layman, but even the expert.

It is a commonplace that words are borrowed from one language by another, as when we appropriate *éclat* from French, *spaghetti* from Italian, *fiesta* from Spanish and *Blitzkrieg* from German. But to what extent and under what circumstances is this borrowing process operative? Does it extend to sounds, grammatical forms and sentence-structure as well as to individual words? How much can a language borrow without, so to speak, going into receivership?

All languages possess sounds, words and sequences of words. But

do they all possess grammatical forms—terminations similar to our marker that forms the plural of most of our nouns, or the -*ing* that forms our gerunds? If not, what replaces them?

All languages have sounds. But to what extent do different languages have the same sounds? How great is the possible range of speech-sounds?

"Semantics" is a lovely-sounding word, and one that has recently been somewhat overworked. To what extent do the semantics of different languages coincide? Does "liberty" or "democracy" mean to a Russian not merely approximately, but even remotely, what it means to us?

"Esthetics" is another overworked term. Is there an esthetics of language? Are some languages inherently beautiful, others ugly? Are words in the same language beautiful or ugly, or is the impression of beauty or ugliness simply a by-product of their semantics?

Above all, is there a "philosophy" of language, a system whereby we may reduce all languages to a least common denominator, permitting us to generalize and reach universal conclusions? Or is each language a law unto itself? Or are there divisions of language which follow universal rules, others which escape regimentation?

Not all of these questions can be fully answered, here or elsewhere. But an awareness of the problems of language is the first necessary step toward their eventual solution.

THE SOUNDS OF LANGUAGE

The spoken word is the foundation of all language.—Linguaphone motto

Spoken language is characterized by language-sounds, produced by the human voice, received by the human ear, and interpreted by the human brain.

Speech-sounds, like all other sounds in nature, are subject to certain physical laws. Sound-waves travel at a given rate, which varies with the nature of the sound and the medium; they also have certain frequencies of vibration. Since speech-sounds are produced by certain human organs and received by others, physiology also enters the picture of the sounds of language. Spoken language therefore functions in harmony with two of the most important physical sciences, physics and physiology. This double physical-science aspect of language has caused some linguists to view their subject as a primarily mechanical or physical activity. That this is erroneous is proved: 1) by the fact that language, to answer its definition, must not only be produced, transmitted and received, but also interpreted; 2) that "language," unless we wish to quibble on the ground of the etymological derivation of the term, can exist also where sound is not involved—in a written message or a meaningful symbol.

Since, however, the most widespread form of language is the spoken one, the importance of sound and its dependence upon physical relationships must not be minimized. Without entering into a complicated technical discussion of the speech-organs, it may be pointed out that the main organs participating in the production of speech-sounds are the lungs, which serve as a bellows for the breath-stream, the glottis,

pharynx and larynx, the vocal cords, the mouth and nose, which act as resonators, the uvula, soft and hard palate, tongue, teeth and lips.

Very roughly speaking, a speech-sound is produced by allowing the breath-stream, as it issues from the lungs, to resonate at some point along the throat, mouth or nose, at the same time subjecting it to some sort of modification or constriction, produced by juxtaposing two or more of the organs enumerated above. The technical terminology used in defining the various kinds of speech-sounds is involved and precise, but of little interest to the layman. Two of the more widely-known terms are "vowel," a sound produced without friction or stop-page, and "consonant," a sound characterized by friction, squeezing or stoppage of the breath in some part of the vocal passage. Vowel-sounds are always accompanied by vibration of the vocal cords; consonant-sounds may or may not have this vibration, the presence or absence of which we can easily perceive by putting our fingers to our Adam's apple and uttering in turn the sound of *d* and that of *t*, or *b* and *p*, or *v* and *f*. Vowel-sounds are often described as front, middle and back, according to the part of the mouth where they are articulated. Conso-nant-sounds, in addition to being voiced or unvoiced (that is, accom-panied or not by vibration of the vocal cords), are also said to be plosive (where the breath-stream is gathered up behind a complete obstruction, then suddenly released, as when we pronounce *p* or *b*), and fricative (where the obstruction is only partial, and the breath-stream escapes gradually, as in the case of *f* or *v*). They may also be subdivided, ac-cording to the point of articulation, into dental, where the obstruction is produced at the teeth, labial (at the lips), etc. A sound like that of *p*, for example, is plosive (full obstruction, suddenly removed), labial (the obstruction is produced by the lips), and unvoiced (unaccom-panied by vibration of the vocal cords).

From the standpoint of transmission, the sound-waves produced when you speak travel through the air at the rate of approximately twelve hundred feet per second, with consonant-sounds generally hav-ing more vibrations per second than vowel-sounds. Differences of high and low pitch are caused by lengthening or shortening the vocal cords; women, whose cords are normally shorter than men's, have higher-pitched voices.

The receiving apparatus, the human ear, is too complicated to be

described in a work of this scope. Of interest, however, is the fact that acoustically, the five basic vowel-sounds (*a* of "father," *o* of "more," *e* of "let," *i* of "machine," *u* of "sure") are perceptible by the ear in the order given, while among the consonant-sounds, *k*, *g*, *ch* and *j* are more preceptible than *p*, *b*, *f*, *v*, *t*, *d*, *s* and *z*. It is fairly well established that in a normal conversation the hearer really hears only about fifty per cent of the sounds produced by the speaker, and supplies the rest out of his own sense of the context. This explains why foreign languages are often easier to speak than to understand, and why unfamiliar words, especially proper names, must be spelled out.

This basic imperfection of the hearing apparatus is also responsible for the distortion of speech-sounds by babies and foreigners, and is believed to be the fundamental cause of sound-change within a given language.

As we begin to investigate the nature and variety of speech-sounds, we are struck by two seemingly contradictory features. The first is that most languages, to judge from their *written* appearance, seem to have approximately the same sounds. The western languages in particular all have what amounts to the same alphabetic notation. But this superficial impression is corrected the minute we begin listening to the actual sounds. The written notation may be the same, but the spoken sounds for the most part diverge, sometimes slightly, sometimes to an astounding degree. The grammars of foreign languages are the first to put us on our guard against confusing sound and spelling; but they seldom do so to a sufficient degree. Any French grammar, for instance, will warn us to pronounce the written symbol *u* in French with rounded lips, not like the *u* of "union" or "cut"; but comparatively few French grammars will warn us to pronounce French *t* with the tip of the tongue touching the back of the upper teeth, not the upper gums, as we do in English. The sound of a French *t* and that of an English *t* are not very far apart; in fact, they are close enough to justify placing French *t* under the heading of "Letters pronounced approximately as in English." Yet there is a difference, and it is precisely by these trifling differences that a native speaker can be distinguished from a foreigner who has learned the language. Actually, almost every sound in every language is a trifle different from what appears to be, in written notation, the same sound in another language.

Furthermore, precise recording instruments show that no two native speakers of a language pronounce any word or sound of that language exactly alike. There is always a tiny spread between your pronunciation and mine, which is fortunate, since it enables us to recognize a person by his voice. These infinitesimal differences arise from the different power of the bellows, or lungs, the different length of the vocal cords, the different shape of the vocal organs, and a different point of articulation of the sound in question.

Little control can be exercised over the first three of these factors. The point of articulation, on the other hand, can be accurately described and controlled by the individual. There is no difference based on race or nationality that can be detected in lung-power, length of vocal cords, or shape of vocal organs; consequently any belief that racial factors control speech-sounds is founded on unscientific premises. As for the point of articulation of a given sound, that can be imitated to perfection by anyone willing to devote sufficient time and labor to the effort. This means that the sounds of a foreign language can be acquired to the point of native-speaker perfection by anyone who cares to do so.

Outside of lack of time, patience, interest and effort, there are two basic causes for the imperfect acquisition of the speech-sounds of a foreign tongue. One is that the sounds are imperfectly heard—something that can and does happen to native speakers as well as to foreigners. The other is deliberate imperfect reproduction, due to one of two causes, or a combination of both—laziness and self-consciousness.

Linguistic laziness causes us to spare ourselves the effort of reproducing a sound that calls for a position of the speech-organs which is unfamiliar to us. This means that the English speaker, even after he has been informed of the difference between an English and a French *t*-sound, will nevertheless substitute his familiar gum-*t* for the French tooth-*t* when speaking French. His unspoken justification for this is precisely the one offered by the grammar: the two sounds are *approximately* the same, and one is ever so much easier than the other! In reality, it is easier only in the sense that whatever has become familiar is easier.

As for self-consciousness, that is something that goes deep down into the roots of human, particularly adult, psychology. The child has

no self-consciousness when he imitates. He is not afraid of sounding ridiculous. Therefore the child imitates better than his elder. The adult mind, on the other hand, has acquired a set of inhibitions, and labors under the fear of the ridiculous. The child will consequently imitate the spoken sounds of a language (his own or another) to the very limit of his faculties of hearing and pronunciation; the adult fears he will sound funny when he pronounces a sound to which he is not accustomed, and this fear causes him to use in its place the nearest sound to which he is accustomed, and which he can pronounce without fear of making himself ridiculous. Young children, of course, learn the spoken sounds of foreign languages infinitely better than their elders.

The basis of a foreign accent is a series of sound-substitutions, in which the foreigner uses his own sounds instead of the sounds of the language he is trying to speak. A trace of foreign accent is present in about ninety-nine per cent of cases where a person of one linguistic background tries to speak another tongue.

This leads to another consideration. If there are some fifty recognized sounds in a language like English, a more or less equal number in French, German, Spanish, Italian and Russian, and these sounds seldom exactly coincide, then what is the total number of possible speech-sounds in all the existing tongues? No one has ever counted them, but, as may be surmised, they run into the thousands. This is not as strange as it sounds. When we consider the many infinitesimal or major shifts in the point of articulation of any given sound, the fact that we can form an obstruction between, say, the tongue and any part of the teeth, gums or hard palate, and that the sound that issues forth when the obstruction is suddenly removed will be somewhat different in each case, we can perceive how many varieties of *t* can be uttered. An *f* can be pronounced by juxtaposing the lower lip and the edge of the upper teeth, as we do; it can also be uttered by using both lips, as the Japanese do when they want to pronounce what passes in an English transcription of Japanese for an *f;* to us, that is not a speech-sound at all, but only a noise we make when we blow out a match. Nothing could be more different than the French *r,* produced by vibrating the uvula, the Spanish *r,* pronounced by trilling the tongue, and the American *r,* made by cupping the tongue. Yet these diverse sounds

are all represented in writing by the same symbol, which misleads Americans into pronouncing French *au revoir* with two Midwestern cupped *r*'s, and Frenchmen into saying "crush" with a trill of the uvula, with the well-known laughable results.

Linguists have long been aware of the insufficiency of the ordinary alphabet to denote even the major variations of sound occurring in the major languages. In the nineteenth century, Lepsius, a German Egyptologist, undertook to construct an alphabet designed to represent the sounds of many languages. His early attempt was expanded within more recent decades into the International Phonetic Alphabet in use among linguists today, which supplies symbols for various shades of sound in practically all tongues. But these symbols are extremely numerous and unwieldy. At the same time, they are far from adequate to record, in written form, the too numerous variations of the sounds of language, of which no individual language exploits more than a small fraction, fifty or sixty at the most, as against a possible total running well into the hundreds and constantly growing.

Under the circumstances, it is not surprising that some linguists should have practically abandoned the phonetic approach (that is, the description of the sounds of a language with reference to the vast field of all possible sounds) to go over to the phonemic approach, whereby the sounds of a language are studied, so to speak, in a vacuum, without reference to or comparison with the sounds of any other language.

These linguists choose to speak of the phonemes rather than of the sounds of a language. The phoneme is defined as a variety of sounds in a given language which the speakers of that language choose to regard as a single sound. The sounds of *k* in "kin" and "skin" are quite different; "kin" has a puff of breath after the *k*, "skin" has not. In many languages, these two sounds of *k* would be considered as separate, and would give rise to semantic confusion if they were interchanged (Sanskrit *kala,* for instance, with the puffless *k* of "skin," means "indistinct"; Sanskrit *khala,* with a puff of breath after the *k,* means "threshing-floor"). English speakers, however, are not aware of a distinction, even though they make it when they speak. The two sounds of *k* never occur in words that might cause confusion. Therefore, the two *k*-sounds are a single phoneme in English, while in Sanskrit they are represented by two different letters of the alphabet and

constitute two distinct phonemes. Two different sounds within one phoneme, like the two sounds of *k* in "kin" and "skin," are called allophones (Greek for "other-sound"), or positional variants of the same phoneme, it being tacitly, even unconsciously, understood among English speakers that the *k*-sound, if initial in the word, shall be accompanied by a puff of breath, but that it shall have no such puff if it follows an initial *s*.

One interesting feature about the phonemic description of a language is that it links sounds to meaning, recognizing the essentially semantic character of language. Another is that it permits the use of ordinary alphabetic symbols over and over again as we pass from one language to another, since the phonemes of one language are never compared to the phonemes of another language. French *t* and English *t,* being different sounds, would have to be differently designated in a complete phonetic alphabet. But since the phonemic alphabet of French serves only French, and that of English only English, there is no difficulty about using the symbol *t* for the French sound in the French phonemic pattern and for the English sound in the English. Phonemics, like phonetics, is still far from perfected, and there are still many points of controversy among its followers. But great strides have been made in the phonemic description of languages.

All living languages are characterized by sound-changes which have occurred and are occurring in the course of their history. The *ch*-sound of "cheese," "church," "churn," for instance, frequent as it is in present-day English, was non-existent in Anglo-Saxon. On the other hand, Anglo-Saxon had a sound, similar to the harsh guttural of German *ach,* which was once designated by the combination *gh* that we still see in "night" and "through," and which has disappeared from modern English. Modern Spanish has a similar guttural, represented by *j* in words like *Méjico, Quijote, jugar.* This sound arose in comparatively recent times out of two earlier sounds which Spanish has utterly lost, the *sh*-sound of "she" and the sound of *s* in "pleasure."

Phonology is the study of sound-transformation along the historical course of a language. The reasons for these transformations are still partly obscure. Some linguists choose to view a part of them as due to the mixture of two or more linguistic stocks, a blend or compromise between two or more sets of speech-sound habits. Others like to bring

in the environmental factor; a new cold climate that encourages greater energy of articulation or causes you to keep your mouth as closed as possible, a warm climate that leads to laziness or relaxation of the speech-organs. These theories are debatable, and are constantly being debated. One plausible theory accounting for a majority of sound-changes is that they are due to imperfect hearing and imitation of one generation's speech by the succeeding generation, leading to a slow, gradual transformation. A variant of this theory is that the majority of sound-changes occur abruptly, as the result of deliberate imitation by the community of an innovation made by someone who has prestige or authority in the group. This personal innovation, in turn, may be deliberate, accidental, or forced by circumstances. An excellent example of the last type, were it not for the fact that it seems not to be true, would be the story to the effect that Philip II of Spain had a lisp which was imitated first by his courtiers, then by other segments of the population, and which gave rise to the lisped *th*-sound of Castilian *cielo, decir* in the place of the original *ts*- and *dz*-sounds of those two words.

An example of a deliberate innovation is the abortive attempt made in eighteenth-century France by literary circles to replace the *r*-sounds of the French language with *z*-sounds, which they deemed more graceful. A phrase like *"Mon mari est allé à Paris acheter une chaire"* was turned in *"Mon mazi est allé à Pazis acheter une chaise."* *Mazi* and *Pazis* were rejected by the bulk of French speakers, along with most forms containing *z* for *r*. *Chaise,* however, struck the popular fancy and remained, along with the original *chaire,* which soon took on the more learned connotation of a professorial chair. English, which had borrowed the word from French long before the attempted innovation, has only the older form, "chair."

Some linguists choose to consider the sound-change process as something operating with the regularity of physical laws. *Lautgesetz* ("sound-law") is a term devised by the German nineteenth-century linguist Leskien to describe this supposed absolute regularity. The formulation of his "law" is to the effect that in a given area and at a given period, if a sound changes, the change will be universal and will have no exceptions. This iron-clad rule is robbed of some of its inflexibility by amendments to the effect that, if apparent exceptions appear

they are due to some extraneous factor, such as learned influence, foreign or dialectal borrowing, analogy, etc.

While not all linguists are disposed to accept this ruling, it has interesting and even useful applications. Beginners in the study of German are often fascinated by the working out of Grimm's Law, whereby it is possible to predict that a Latin or Greek *d* will appear in English as a *t* and in German as a *z* or *ss* (*dentem*, "tooth," *Zahn; pedem*, "foot," *Fuss*). Romance beginners like to watch the working out of a Latin *ct*-group, which regularly becomes a *tt* in Italian, an *it* in French and Portuguese, a *ch* in Spanish, a *pt* in Rumanian (*noctem, notte, nuit, noite, noche, noapte; lactem, latte, lait, leite, leche, lapte*).

On the other hand, the "no exception" clause in the sound-law runs squarely into fully observable facts that contradict it. The French *chaise* appearing above is a case in point; a few French words containing *r* went through with the shift; others did not.

In addition to their characteristic sounds, languages are distinguished by certain subsidiary features. Chief among these is what is commonly known as "accentuation," a term which in most modern languages is synonymous with stress. A certain syllable of the word is pronounced with greater vocal force than the rest. The same occurs with a certain word within the sentence or phrase. In the Germanic languages, including English, the stress is usually on the initial syllable of a word of two or more syllables. English, by reason of its many loan-words from foreign sources, presents numerous exceptions to this generalization. (In the sentence just read, there are nine words of two or more syllables, and in three of them the stress is not on the initial syllable.) The Romance languages, outside of French, more often stress the penult. French is said to stress the last syllable of the word, but in reality the stress is fairly evenly distributed throughout. The Slavic languages show great diversity in this respect, Czech having initial accentuation, Polish regularly stressing the penult, while in Russian the place of the stress is unpredictable.

That the accent was not always a matter of relative stress or vigor of utterance is indicated by the etymology of the word itself (*ad-cantum*, "upon-singing"). The earlier accentuation of the languages of our Indo-European group seems to have been largely a matter not of stress, but of musical pitch, with the accented syllable pronounced on a

higher note than the surrounding syllables. This musical pitch is still discernible in languages like Swedish and Serbo-Croatian. In languages of other families, such as Chinese, the voice-pitch is utilized to convey semantic distinctions: *ma,* pronounced in one tone, means "mother"; in another tone, "flax"; in a third tone, "horse." This means that pitch in Chinese becomes phonemic, and must be observed under penalty of our being misunderstood. With us, pitch serves at the most to convey emotion or emphasis, but not in accordance with any set rule generally accepted by the speakers.

Another factor that enters consideration under the heading of sounds is the relative rapidity of speech. All languages may, of course, be spoken more or less rapidly. It has been observed, however, that the average rate for French is about 350 syllables a minute; for Japanese, 310; for German, 250; for English, 220; while most languages of the South Seas do not go beyond 50 syllables a minute. Those who think Frenchmen speak too fast are therefore not altogether wrong, at least from the standpoint of an English speaker. Familiarity or unfamiliarity with the language that is being spoken naturally has a great deal to do with the impression of rapidity that one receives. Within the same language, there are different rates of speed for different groups of speakers. It has been estimated that the normal American woman speaks at the rate of 175 words per minute, as against 150 for the average male. This difference has been linked with greater emotional instability, but the connection is as yet unproved.

With the sounds of language running into the hundreds or even thousands, curios in the field of speech-sounds naturally abound. Some tongues, like Hawaiian, are extremely poor in sounds; the only consonant-sounds of Hawaiian are *h, k, l, m, n, p* and *w,* and none of them may be used without a following vowel, with the result that a Hawaiian trying to say "Merry Christmas" will come out with "Mele Kalikimaka."

Among the widespread languages, Arabic is the one having the greatest variety of guttural sounds; but the tongues of the Caucasus are generally conceded to be the ones having the richest assortment of consonant-sounds.

The Hottentot-Bushman languages of southwest Africa use grunts and clicks as normal parts of their speech-sounds. Some European

languages seem to be able to get along without vowels; the Yugoslav name for Trieste is *Trst,* while in Czech "a hill full of fog" is *vrch pln mlh;* actually, the *r* and *l* in these words serve as vowels.

Japanese lacks the sound of *l,* and a Japanese speaker pronouncing a foreign word with *l* usually substitutes a lightly trilled *r.* Chinese reverses this process, saying "lice" for "rice."

In Spanish, no word begins with *s* followed by another consonant, and a Spanish speaker trying to pronounce "Spanish" will normally say "Espanish."

Two of the questions asked in the preceding chapter come to mind at this point. They concern the "dynamism" and the "philosophy" of language.

Does our survey of language-sounds cast any light upon the problem of language-change? Some languages transform their sound-pattern at a relatively rapid, others at a relatively slow rate. Physical and psychological activity, climate, racial mixture, linguistic blending, have all been suggested as possible causes for rapid sound-shifts, isolation and sedentary life for linguistic conservatism. It is quite possible that any or all of these factors play a role, but the role is difficult to prove. It is, incidentally, equally difficult to disprove.

As for the philosophy of language, what do language-sounds have to teach us? We have seen in them infinite diversity, coupled with a fundamental similarity hinging on the fact that they are produced by basically identical vocal organs and received by basically identical auditory organs. Fundamental divergences, if any, would seem to reside rather in the semantic division of language, the interpretation that is given by the human brain to conventionalized sounds. The first conclusion which we are able to attain appears to be that the philosophy of language must be sought rather in language taken as a whole than in language taken in a single one of its compartments.

WORDS

The word makes men free. Whoever cannot express himself is a
slave. Speaking is an act of freedom; the word is freedom itself.
—Ludwig Feuerbach

The word may be defined, from the mechanical standpoint, as a succession of speech-sounds conventionally arranged; it may also be defined from the semantic end as the most elementary speech-unit of meaning.

A language is essentially an array of words, each of which is accepted by the social group as conveying a given meaning or meanings. This fact is occasionally lost sight of by some language educators, who concentrate their efforts on grammatical forms and syntactical arrangement to the detriment of vocabulary, with the ludicrous result that some of their students are able to conjugate irregular verbs in perfect fashion, but are unable to form a sentence in the foreign language because they don't know some of the words they would like to put in.

The quality of inarticulateness, or floundering about for the appropriate word, is by no means limited to those trying to speak a foreign language. It can be and very often is characteristic of native speakers. Orators, political and otherwise, are frequently at a loss for a word.

This need not surprise us. While the speakers of a given language normally share all of the language's limited number of speech-sounds or phonemes, all of the language's basic grammatical forms, likewise limited in number, and all of the language's elementary syntactical combinations, they are far from sharing all of the language's stock of words.

The complete English vocabulary is said to consist of about half a million words. It is doubtful if any individual knows more than one-

fifth of this number. Hundreds of thousands of words, though they appear listed in the large dictionaries, belong to special scientific, professional or trade parlances, and are not used or even recognized by the average speaker. Every field of modern activity has its own specialized vocabulary, with which only those engaged in the field are familiar. There is a special vocabulary of medicine, one of psychology, one of botany, one of music, even one of boiler-making and cattle-raising.

The question therefore is not so much how many words there are in a language as how many of these words the average speaker knows.

It is here that we run into widely divergent figures and opinions. Several years ago, an Englishman named D'Orsay produced a study based on the everyday speech of a group of fruit-pickers, in which he presented the rather startling conclusion that the use-vocabulary of the illiterate and semi-literate does not exceed 500 words. Very recently, the President of the Linguaphone Institute estimated, from a study of subway conversations, that the average person uses about 1,000 workable words in his lifetime, and seldom exceeds 1,200.

Many reputable linguists have challenged these estimates. A very careful study made by a group of psychologists presents the following figures: an average four-year-old child knows over 5,000 words; at six, he reaches a vocabulary of 14,000 words; at eight, of 26,000 words; at ten, of 34,000.

Still another estimate places the average two-year-old vocabulary at about 300 words, the six-year-old at between 2,000 and 3,000, the stupid adult at 10,000, and the average adult at between 35,000 and 70,000.

The discrepancy in these estimates may be partially due to confusion between use-vocabulary and recognition-vocabulary. For every word that we constantly use in our everyday speech, there are perhaps ten words that we are able to recognize when we hear them or see them in print. Some of these we are also able to use when the occasion calls for them. This would mean that even the child or adult having a normal use-vocabulary of 1,000 words would "know" 11,000.

Frequency of use of certain words partly resides within the individual, his calling and his interests. But to an even greater degree, it depends on the nature of the words themselves. Certain words will occur dozens of times in the course of a very brief conversation on any topic whatsoever. Others will be used very occasionally, and under

special circumstances. The most frequently used word in the English vocabulary, both in speech and in writing, is "the." "A" or "an," common prepositions like "of," "to," "in," "for," common pronouns like "I," "me," "you," "him," "she," "they," common verb-forms like "am," "is," "are," "had," "have," naturally tend to occur again and again. It is this frequency of occurrence, perhaps, coupled with the nature of the ordinary casual conversation, that fosters the legend of the extremely limited vocabulary of the less-educated speakers.

It is also perhaps forgotten that speakers naturally tend to acquire and use those words which fit into the picture of their everyday lives. An illiterate peasant knows the names of plants, shrubs, trees, insects, animals and farm tools of which a highly educated and cultured city dweller may be almost totally ignorant. Education and culture have a great deal to do with vocabulary-range, but not inevitably so; illiterate speakers sometimes reveal an amazing range of spoken vocabulary.

The point must also be made that recognition, or even use, of certain words does not always indicate an accurate knowledge of what those words really denote. Words like "atomic" and "cyclotron" are used by speakers and writers who have a very hazy idea of what those words stand for. Even simpler, "picturable" words are often used with a vague understanding of what they denote. If you are inclined to doubt this, try to give a non-technical definition of an "elm" that will serve to distinguish it from other trees or of a "thrush" that will set it apart from other birds.

The question of vocabulary-possession is further complicated by semantics. A given word, even of the picturable variety, seldom elicits quite the same mental image in any two individuals, because each word is tied up in our consciousness with an entire series of subconscious associations. "Lion" may evoke in one mind the picture of Metro-Goldwyn-Mayer's snarling Leo; in another mind it may be associated with the memory of the calm, majestic stone lions of the New York Public Library.

The matter of individual vocabulary-range depends on several complex factors: frequency of use, use vs. recognition, specialized vocabularies, greater or lesser accuracy in use or recognition, even semantic connotation. Under the circumstances, estimates as to the probable

vocabulary-range of various classes of speakers are bound to be divergent and unsatisfactory.

Greater precision can, of course, be achieved in the matter of vocabulary-range for literary purposes. But even here we run into striking discrepancies. One authority, for example, estimates that Shakespeare used 16,000 different words in his works, another 20,000, while a third places the figure at 25,000. Racine is said to have used only 6,000 different words, Victor Hugo 20,000. Milton's literary vocabulary is variously estimated at 8,000 and 11,000 words. For newspaper usage we are informed that a single issue of the French *Le Temps* contained 3,800 different words.

Here again the suspicion is aroused that different standards may account for the discrepancies. Even in a little-inflected language like English, morphological variants of the same word ("ox," "oxen"; "foot," "feet"; "book," "books"; "I," "me"; "go," "goes," "going," "went," "gone") bring up the question whether such variants should be counted as individual words, or lumped together as forms of a single word. Such a difference of standard might easily explain the 16,000 to 25,000 word-count for Shakespeare. In the case of a more highly inflected language like French, where a single verb can have several dozen morphological variants, it might account for Racine's 6,000 vs. Hugo's 20,000 words. Lastly, literature is always open to the charge that it neglects certain classes of words which are of rather frequent occurrence in speech ("radio" and "movies" might be taken as examples; we speak of them rather frequently, but it is very difficult to find them in any but the most modern works of literature).

The double standard described above rises to plague linguists every time they are asked, as often happens, which of two languages has the more extensive vocabulary. Should only root-words be considered, or should all morphological variants be taken into account? If the latter system is followed, highly inflected tongues like Russian or Latin will far outstrip in total number of words languages like Chinese, which has no flectional endings at all, or English, which had discarded many of them.

Basing ourselves upon the standard of root-words regardless of morphological variants, which seems more scientific and practical, we find that there is almost as much variation in the vocabulary range

of individual languages as there is among the speakers of a single tongue. Depending upon the complexity of the speakers' civilization, some languages have far more extensive vocabularies than others. The half-million words of English is rather closely paralleled by other tongues of western civilization; the so-called "static" languages, like Chinese or Hindustani, lag behind, and the contrast is even greater in the tongues of semi-civilized or uncivilized groups, like the Zulus and the Australian aborigines.

This, however, should not deceive us into making easy generalizations concerning the vocabulary-range of so-called "primitive" languages. It is true that they lack the scientific, technological and occupational word-apparatus of the more "civilized" tongues, but they very often make up for this deficiency with an amazing complexity of objects, concepts and terms for which we, from our supposed vantage-point, have no equivalent. The best proof of this is that we are sometimes compelled to borrow such terms just as they stand instead of translating them into our language, as has happened with the "taboo" of the South Sea Islands, the "totem" and "wampum" of the American Indians, and the "boomerang" of the Australian natives. Elsewhere we are forced to give a conventional translation of a term of which we have picked up the semantic connotation, as when we copy the Chinese and speak of "saving face." People who explore a "primitive" language with the idea that they will have to learn a very limited vocabulary are often in for strange surprises.

Again, it is amazing to what extent languages, even of the primitive variety, possess the machinery for borrowing, adapting or creating words once the object or concept denoted by these words is brought to their notice. This mental machinery, which all languages seem to possess in approximately equal measure, will be discussed at length under the appropriate headings.

The vocabularies of Classical languages, like Sanskrit, Greek and Latin, naturally lacked all the expressions of modern technology, as well as thousands of other modern words. In spite of this, they were remarkably extensive. A fairly complete vocabulary of ancient Greek lists well over 100,000 words, while one of Latin has over 80,000, and these figures leave out of account the fact that there must have been thousands of Greek and Latin words in the more popular spoken

tongue which did not find their way into the literary records that have come down to us. The Classical vocabularies include thousands of words denoting objects and even concepts which have since become obsolete. While less complicated than our own, the Classical civilizations were nevertheless formidably complex.

Words, to a far greater degree than sounds, grammatical forms, or syntactical arrangement, are subject to change. Some of the major divisions of vocabulary-change are loss by obsolescence, usually brought about by the disappearance of an object or concept; quasi-mechanical growth by morphological or structural devices, as when an adjective like "Congressional" is built out of "Congress" plus two separate suffixes; growth by combination, as when "railroad" is composed out of two separate words, neither of which has the meaning of the composite word.

Of a less mechanical nature in the process of vocabulary-growth are word-borrowing, word-coinage and semantic shift, with their concomitant extension into slang, cant, jargon and, ultimately, the vernacular and even the literary tongue.

These processes of growth and development are common to morphological forms and syntactical structure as well as to the individual word, though the latter generally offers by far the best and most striking exemplifications. Their discussion will therefore be left in abeyance until the other two great compartments of language have been described.

The Structure of Language

The minimum grammar is no grammar at all.—Giuseppe Peano

"Grammar" is a term devised by the Greeks, in whose language it literally means "that which pertains to writing." The modern tendency, however, is to regard grammar as the study of speech rather than of writing, or at least of both.

The Romans had a saying *Verba volant, scripta manent* ("What is spoken flies away, what is written endures"), which perhaps serves to illustrate the point of view of the Greeks, as well as of grammarians generally. The written word, remaining as a permanent record, is worthy of greater consideration than the fleeting spoken word.

Yet the spoken word antedates and forms the basis of the written word. Consequently, modern linguists, who care little about the prescriptive grammar of languages, which is concerned with how people *should* speak, and devote most of their attention to descriptive grammar, dealing with how they actually *do* speak, have some measure of justification. To avoid misunderstandings, they generally avoid the word "grammar" and use instead "structure" or, more precisely, "morphology."

That this is a modern trend is amply indicated by the older grammars on record, which are almost without exception of the prescriptive, normative type. The first known grammar is Panini's *Sutras,* a fourth-century B.C. treatise on the Sanskrit language, consisting of some four thousand very brief statements of linguistic phenomena.

Numerous grammars of the prescriptive type have been left to us by the Greeks and Romans, and it may be said that the prescriptive type of grammar predominates down to the beginning of the twentieth century.

Yet there are exceptions. One Roman grammarian, Probus, has left us a list of over three hundred terms commonly mispronounced or otherwise misused in his day, along with the "correct" forms. Needless to say, it is the "incorrect" variants, revealing spoken-language trends, that interest the present-day linguistic researcher.

During the early Middle Ages, brief glossaries for the use of travellers and missionaries were the vogue rather than full-fledged grammars. One such glossary, from the eighth century A.D., giving a list of Romance words and phrases for the use of German speakers, reminds one of a modern Army phrase-book; it contains such expressions as "Give me a haircut" and "Shave the back of my neck."

Modern grammars continue largely in the classical tradition, giving the forms of the language under consideration as they should be rather than as they are spoken. Notable strides have been made of late in presenting both usages, the more strictly literary and the broader colloquial, but since the latter includes all the gradations of vernacular, dialect, jargon and slang, linguists are still divided as to just where to draw the line.

In a narrower definition, structure includes those significant variations in the form of words (like "ox," "oxen"; "foot," "feet"; "go," "goes") which add accessory notions to the basic meaning conveyed by the root-word. More broadly, structure includes also such word-arrangements as may likewise serve to modify meaning. To illustrate: in "Peter sees Paul" there is nothing in the form of "Peter" or "Paul" to indicate that Peter does the seeing while Paul is seen; it is only their relative position that shows us that. But since matters of word-arrangement pertain to the domain of syntax, the boundary-line between what is strictly morphology and what is strictly syntax is often hard to draw or distinguish.

The Sanskrit, Greek and Latin grammarians, basing themselves upon their own languages, which were all three of a highly flexional type, evolved first and foremost a series of parts of speech, a very limited number of pigeon-holes into which all the words of their languages would fit without difficulty or confusion. The Greek philosophers, particularly, are credited with the creation of such terms and concepts as "article," "noun," "adjective," "pronoun," "verb," "adverb," "preposition," "conjunction" and "interjection." This classification of

words, while very well suited to the ancient Indo-European languages and the modern ones which have retained the ancestral structure, does not work at all well for languages of different types, like the Chinese, American Indian or African Negro. It does not even altogether suit those Indo-European languages, like English, which have largely gotten rid of their flexional endings and gone over instead to a system of position and prepositions.

In Latin (and this applies also to our ancestral Anglo-Saxon) it was not at all necessary to adhere to a word-order like "Peter sees Paul." One could place "Peter" and "Paul" anywhere in the combination, because *Petrus* carried a *-us* ending which marked him as the doer of the action, *Paulum* a *-um* ending which marked him as the receiver of the action. When English evolved out of Anglo-Saxon, and the Romance languages out of Latin, these distinctive endings were for the most part lost, with the result that position in the sentence became a prime factor if the meaning was to be retained. In addition, Latin would say *Paulī* for "of Paul," *Paulō* for "to Paul." The Romance languages here are forced to use the prepositions "of" and "to," while English gets along either by using those prepositions, or by pressing into service the only case-ending it has not discarded, ("Paul's,") while at the same time using position as a substitute for "to" ("I gave Paul the book," where it is conventionally understood that if there are two objects the first carries the accessory notion of "to," the second does not).

In the matter of verbs, the ancient Indo-European languages would use a form like *amābō* with the sense of "I shall love." Here *ama-* conveys the basic notion of "love," *-b-* indicates futurity, and *-ō* indicates the first person singular, "I," as the doer. Modern English isolates the three concepts into three separate words, with the result that while Latin had many dozens of individual forms from the same verb, each conveying all sorts of accessory notions of person, number, time, mode of action, etc., English uses a series of subject-pronouns ("I," "you," "he," "they"), a relatively limited number of auxiliaries like "shall," "should," "had," "may," "might," and is then left with the need of very few inflected verb-forms; a weak verb like "love" has only four ("love," "loves," "loving," "loved"), while a strong verb has five ("see," "sees," "saw," "seeing," "seen").

This means in turn that the distinction between a verb, a noun, an adjective, etc., so easy to make in languages where the ending shrieks out the name of a part of speech, becomes quite difficult once the endings are no longer there. Is "mail" a verb, a noun, or an adjective? ("Mail the letter"; "Send it in the mail"; "Put it in the mail-box.") Is "up" an adverb, a preposition, a verb, a noun, or an adjective? ("I am getting up"; "Let's go up the street"; "I'll up you five dollars"; "The ups and downs of life"; "I am going uptown.") Needless to say, each of these words began its career as a definite part of speech, and the other uses are later "functional changes," facilitated by the fact that our words have few or no distinctive endings, and can therefore easily pass from one category to another.

Languages which have retained the ending-system can, of course, transfer words from one category to another, but usually the transfer is attended by a change of label. Italian has *posta* for the noun "mail," but *postale* for the adjective and *impostare* for the verb.

Chinese, on the contrary, has carried the process of functional change farther than English. While some Chinese words, by virtue of their meaning, can be said to be specific parts of speech, the majority have the greatest freedom of movement from one category to another, depending upon their use and position in the sentence. A Chinese root like *ta* can be used as a noun to mean "greatness," as an adjective to mean "great," as a verb meaning "to be great" or "to make great," as an adverb meaning "greatly." The exact meaning is made clear by where it stands in the sentence.

On the other hand, there are languages which incorporate into a single verb-form a far larger number of concepts than even the most ambitious Indo-European tongue. A single verb-form in Japanese means "to desire to sleep," while in Turkish one single verb-form has the meaning "to be impossible to be made to be loved."

Linguists have therefore attempted, not too successfully, to classify languages, according to their structure, as "flexional" (like Latin and, to some extent, English), "isolating" (like Chinese), "agglutinative" (like Turkish), "incorporating" or "polysynthetic" (like some American Indian tongues, where an entire series of concepts like "I am looking for a village" is contained within a single "word"; it would perhaps

be more precise to say that in these languages the distinction between word and sentence is partly effaced).

Two misconceptions which frequently beset the layman are that all languages must necessarily work out in somewhat the same fashion, and that the structure of the languages of primitive groups is necessarily simple. Nothing could be further from the truth.

We not only take for granted the similarities we note in such languages as English, French, Spanish, German, even Russian and Latin, but wonder with some resentment why there are not more. These similarities are due simply to the fact that these languages are closely related; in fact, were at one remote time a single language. As we wander out of the Indo-European field, we shall note vast and fundamental differences in linguistic mentality, accompanied, strangely enough, by a sufficient number of sporadic, yet essential similarities to indicate that all human beings are subject to similar basic experiences and can, though not of necessity, evolve similar thought-and-language processes.

As for the simplicity of primitive languages, that is totally a figment of the imagination. In some Eskimo languages a "noun" can have more than one thousand forms, each with its own precise meaning. In a language of Guatemala any verb can have thousands of different forms, by the addition of various endings. In the tongue of the Kwakiutl Indians, you cannot say "the man lies ill," but must phrase it somewhat like this: "This-visible-man-near-me, I-know, lies-ill-on-his-side-on-the-skins in-the-present-house-near-us."

A comparison of our own grammatical concepts with those of other languages and groups will begin to reveal some of the fundamental differences hinted at above.

With us, the concept of grammatical gender is basic. We divide up nouns into "masculine," "feminine" and "neuter" according as they denote males, females or inanimate objects. We do not, however, carry this concept beyond the point of replacing the noun by "he," "she" or "it." There is nothing left today in our nouns to indicate their gender, though there once was. "Man," "woman" and "table" are respectively masculine, feminine and neuter by reason of their meaning, but not of their termination. Other tongues often give an excellent clue to gender in the endings of their nouns; in Latin and Russian, for example,

nouns ending in -a are feminine, though with exceptions, and adjectives used with them must "agree in gender"; that is, also take on a feminine ending.

Some languages of our group, like Latin, Greek, German and Russian, divide nouns as we do into masculine, feminine and neuter, but with seeming lack of logic make many inanimate objects masculine or feminine, and a few animate objects neuter (we have some remnants of this "illogical" classification, as when we call a ship "she" or a baby "it").

Other languages of our group have discarded the neuter gender, leaving only a masculine and a feminine, as is the case in French, Spanish and Italian, where you must refer to a table as "she" and a pencil as "he." The same two-gender system appears also in the Semitic tongues, but only by coincidence.

This series of discrepancies within tongues of the same family leaves both laymen and specialists bewildered. The latter have not yet been able to figure out just how and why the gender-system arose. The best hypothesis is that the original distinction was made between living and non-living objects, but that the elements and forces of nature were considered as divine and consequently living. Animate beings were then further subdivided by sex into masculine and feminine. The sun, moon and sky were masculine, the earth feminine, because fertilized from heaven. Certain elements, like fire, were variously considered as active (Latin *ignis* and Sanskrit *agnih* are masculine) or inert (Greek *pyr* and German *Feuer* are neuter). Then, as the Indo-European tongue broke up into various widely separated languages, wholesale shifts took place. In Latin the sun is masculine and the moon feminine, while in German it is just the opposite. Some linguists choose to view this as due to the sun's strength in southern lands and its weakness in the north, and to the gentleness of the southern moon as contrasted with the icy moon of cold northern nights. As for the occasional occurrence of the neuter gender in connection with animate beings (German *Mädchen* and *Fräulein*, "girl" and "miss," or English "it" referring to a baby), that is ascribed to the fact that the individual in question has not yet proved to be animate by reproducing offspring, though a simpler explanation would be that in German all nouns hav-

ing the diminutive suffixes *-chen* and *-lein* are neuter, and that "it" referring to a baby is simply due to ignorance of the baby's sex.

The minute we leave the Indo-European and Semitic groups, we are struck by the radically different concepts appearing elsewhere. Some languages make no gender distinction whatsoever. In Hungarian the same word means "he," "she," "it." In Chinese and Japanese gender does not enter the language picture at all, save insofar as one may specifically want to indicate sex by an appropriate word (the "bull-child" and "cow-child" of Chinese-English pidgin is a good illustration).

Many languages divide words into animate and inanimate, but here again strange exceptions appear. The Algonquian languages include in their animate class such words as "kettle," "knee," "maize," "bean" and "tobacco."

Other tongues make classifications which correspond to our genders only to the extent that they show the desire to classify. Some of the Dravidian languages of southern India lump females with inanimate objects into an "inferior" gender, but place goddesses with males in a "superior" caste. The Bantu languages of Africa classify nouns by means of different prefixes into seventeen classes, and the appropriate prefix must be used with all modifiers associated with the noun. In the language of the Andaman Islands, which lie in the Bay of Bengal, the human body is divided into seven parts, and this division is extended to inanimate objects associated with the human parts in question. Chinese, Japanese and Malay do not divide their nouns by gender, but if they are used with numerals, classifiers appear which put the object into a definite class; in Japanese, for instance, *dai* is a classifier-suffix used for conveyances; for "two taxis," you use not *takushi ni* ("taxi two"), but *taskushi ni-dai* ("taxi two-conveyance"). An inkling of this system comes to us *via* pidgin English: "one fella man," "five piecee shirt."

In sum, it may be said that while few languages classify objects and persons in exactly the same way, most of them indicate some measure of desire for classification, based, however, on the most diverse factors.

Another concept to us essential is that of number. We insist on defining persons and things as singular or plural. In this respect, English, which has discarded gender-terminations, retains an ending for

the plural, at least for nouns. There are a few exceptions, like "deer," "sheep," "grouse," which will at least serve to explain to us in what manner some other languages manage to get along without distinctive plural forms.

The ancient Indo-European languages, notably Sanskrit and Greek, as well as the Semitic tongues, had, in addition to distinctive singular and plural forms, also a dual, indicating two. This, of course, was used especially for things that come in pairs, like eyes, hands, feet. But the dual proved cumbersome to Indo-European speakers, and was generally discarded. Arabic still makes use of a dual. Some Melanesian languages are said to possess pronoun forms indicating three and four.

In some American Indian and native Australian languages, on the other hand, the grammatical distinction between singular and plural utterly fails to exist. The Sioux language has a distinctive plural only for animate beings. In Japanese a plural can be formed if it is deemed necessary, but it is seldom so deemed. Even where the plural is used, devices for forming it are extremely diverse. Mayan simply adds the word for "they" to the singular. Many languages repeat the singular form (Bushman *tu,* "mouth," *tu-tu,* "mouths"). Tahitian says "heapman" for "men." A language of Burma says "dog-all" for "dogs."

If we think it strange that a language should lack the distinction between "dog" and "dogs," let us recall: 1) that we make no distinction between "sheep" and "sheep"; 2) that while we make the distinction in the noun or pronoun, we never make it in the adjective, and seldom in the verb; our "white dog," "white dogs" and "I love," "we love" seems almost as strange to a Frenchman as Japanese *ko-domo,* used indifferently for "child" or "children," does to us.

The actual use of the plural form, where it definitely exists, does not always follow what seems a logical system to us. That we ourselves are not too logical in its application is illustrated by such time-honored expressions as "a six-foot pole," "ten head of cattle," "two dozen eggs." Finnish and Hungarian always use the singular instead of the plural after numerals, so that a sentence like "I see five man" is natural to them. Arabic uses the plural with numerals from three to ten, the singular from eleven on. Russian has the genitive singular of the noun after two, three and four, the genitive plural from five on ("one house," "two of house," "five of houses").

Cases constitute another grammatical concept which appears in some languages, not in others. In English we speak of a nominative or subjective, a genitive or possessive, and an accusative or objective, but while the genitive is distinct from the others in nouns ("Paul's" vs. "Paul"), separate nominative and accusative forms appear only in pronouns ("I" vs. "me"; "he" vs. "him"; "they" vs. "them").

The original Indo-European parent-language seems to have had eight cases: nominative or subject-case; genitive or possession-case; dative or indirect object-case; accusative or direct object-case; vocative or direct address-case; instrumental or with-case; locative or in-case; ablative or from-case. Each of these had its own appropriate, distinctive endings, which permitted the language to dispense with fixed word-order on the one hand, with prepositions on the other. As the case-endings fell away in some divisions of Indo-European, syntactical position and the use of prepositions grew in importance. But it would be a mistake to attribute the use of these devices exclusively to the falling-off of the ancient case-endings. Russian today still retains seven of the original eight case-forms of Indo-European, but has concomitantly developed a full array of prepositions and a fairly fixed word-order.

The total number of possible grammatical cases has been estimated at thirty-six, which is probably an understatement. Tongues like Finnish, Hungarian and Turkish still have many of them (the official Finnish grammar speaks of fifteen, including such forbidding names as "inessive," "allative," "translative" and "comitative"). In these tongues the case-marker is added to the noun, with the plural-marker, if any, inserted between the two. All of the words which with us are prepositions ("of," "by," "from," "in," "with") appear in these languages as postpositions. In Hungarian *a ház* is "the house"; *a házban* "in the house"; *a házak* "the houses"; *a házakban* "in the houses." A somewhat similar system appears in Japanese, where *Tōkyō kara* means "from Tokyo" and *Tōkyō ni* "in Tokyo."

From the standpoint of the spoken language, it would seem to make little difference whether the postposition is kept separate from the noun, as in Japanese, or treated as a case-ending and attached to the noun, as in Latin. Yet there are two important structural differences. The first is that in Latin the root *Paul-* and the endings *-us, -ī, -ō, -um,*

etc., have no separate spoken-language existence, while in Japanese *Tōkyō* and *kara* do. Secondly, Latin and similar Indo-European languages use two entirely different sets of endings for the singular and the plural (even three in those languages where there is a dual number), whereas in Finnish, Hungarian, Turkish and Japanese the same set of postpositions serves both numbers. Under the circumstances, many linguists reject the application of the terms "case" and "case-ending" when speaking of the tongues that use postpositions.

English has kept only one of its former noun-cases separate from the general form into which all the others have coalesced. This is the genitive or possessive, which is marked by *'s* or a mere apostrophe. The Romance languages, with the exception of Rumanian, have not saved even that much. By way of contrast, most Slavic languages have seven cases, and if we go outside of the Indo-European field we find that the Georgian of the Caucasus has twenty-three forms of the noun that may be compared to cases.

The personal pronouns have done better in saving their ancient forms. We still retain a nominative "I," a genitive "my" and an accusative "me," while German goes us one better in distinguishing between a dative *mir* and an accusative *mich*.

One grammatical category which some languages enthusiastically accept, to the point of making it the most frequently used word in the language, and others absolutely reject, is the definite article. Ancient Greek had a word for "the," Latin did not. Quintilian, a Roman second-century grammarian, writing about his language which he compares with Greek, says: *"Nostra lingua articulum non desiderat"* ("Our language does not desire an article"). That he was wrong is proved by the later development of the Romance languages, all of which, without exception, developed a word for "the" out of the earlier words for "that," a process in which they were accompanied by the Germanic languages, including English. The Slavic tongues, with the exception of Bulgarian, refused to go along this road, and the result today is that a Slav who has acquired an insufficient amount of English says "I see book on table." Outside the Indo-European group, some languages use an article, others don't "desire" it.

The languages that use an article generally put it before the noun, but several append it in the form "boy-the." Among the tongues that

have a postposed article are Rumanian, Bulgarian, Swedish, Norwegian, Danish, Icelandic and Chinese.

The question arises at this point whether the article is necessary or "desirable." Its semantic function, where it exists, is to convey to the listener the impression that the object named has already been mentioned. A Slav can easily retort that if the object has been mentioned, your listener should be perfectly aware of the fact. The article therefore takes its place among those grammatical forms which can be dispensed with if one wishes to save time and space. Actually, we omit all "the"s, "a"s and "an"s in telegrams.

Historically, the growth of the article seems to be the result of an emphatic or concretizing tendency. The object is pointed to and described as "that book." But constant repetition weakens the emphatic force of the demonstrative, and it insensibly turns into a mere indicator of objectivity. Its original emphatic, concretizing, even glorifying function can be discerned in the tendency of some languages to use it with proper names, as when French says *la Boncour* for "Mrs. Boncour," or Italian *il Petrarca* for "Petrarch."

The adjective is defined as a word that limits or describes a noun. In many languages the adjective has no separate existence from the noun. In one Dravidian language of southern India a concept like "strong man" is expressed by "strength-man," making a universal rule of our occasional performance in "mail-box." In Japanese many adjectives are conjugated like verbs; "black" handled in this fashion means "to be black." That the noun itself is not an indispensable concept is indicated by the Aranta of Australia, in which things have to be turned into actions or states, so that "man" is literally rendered by "being-more" (man is a superior being).

Great variety of forms and concepts appears in pronouns. Many languages make a distinction between "we" including the person spoken to and "we" from which the person addressed is excluded. The distinction of gender which we make in the third person singular ("he," "she," "it"), but not in the plural ("they") is carried on by some languages to the second and even the first person. In Arabic a different "you" is used according to the sex of the person addressed.

Demonstrative pronouns have great range. Archaic English used to make a threefold distinction between "this" (near the speaker), "that"

(near the person addressed) and "yon" (far removed from both). This distinction still exists in many modern languages, notably Spanish (*este, ese, aquel*). Other tongues carry the distinction much further. The Cree Indian language has a special "that" to be used only in connection with persons and things just gone out of sight, while Ilocano, a tongue of the Philippines, has three different words for "this" referring to a visible object, a fourth for things not in view, and a fifth for past things that no longer exist.

In Indo-European, the verb is subject to the grammatical concepts of person, number, tense, mood and voice. These distinctions in the original Indo-European tongue are very clear-cut. A form like Latin *amarentur* is third person plural, imperfect subjunctive passive, and means "they might be loved," something which it takes us four words to express.

Any or all of these concepts may be dispensed with in individual languages. Chinese refuses to make any distinction whatsoever in the verb itself, which is an immutable root. All one can do in Chinese to express "I am writing," "I wrote," "I shall write," etc., is to use the word for "I" and the root "write," preceded, if one wishes, by an expression like "now," "yesterday," "tomorrow."

Japanese does not normally even take the trouble to indicate the doer of the action, though it does have verb-forms that convey the accessory notions of time, mode, voice, and even such things as causation or the desire to perform a certain action. "There is a going" is the most literal translation of the Japanese *ikimasu,* which does duty for "I, you, he, she, we, they, am, is or are going." To the criticism that this leaves things in a confused state, the Japanese reply that two intelligent persons carrying on a connected conversation will know perfectly well "who" is going. On the other hand, Japanese verbs carry a full line of varying forms in accordance with the concept of politeness or familiarity (*iku,* "to go," when speaking familiarly; *ikimasu,* "to go," when speaking politely).

Certain languages are extremely poor in time-distinctions, others extremely rich. As against the timeless "write" of Chinese, one Indian language of the Pacific Northwest distinguishes between recent past, remote past and mythological past, while a native Australian language

has five future tenses, two for things that will happen today, the others for more indefinite future periods.

There is reason to believe that the only two true tenses of original Indo-European were a present, doing service also for the future, and a past. From these two fundamental time-notions there developed in the course of centuries the multiplicity of tenses which harass today's speakers. Some linguists hold that the distinction between present and past was originally not a time-distinction at all, but one of manner of action, incomplete vs. completed, or instantaneous vs. durative, a distinction which still appears in the aspects of Slavic verbs. But since incomplete action is normally in the present or future, and completed action in the past, the sense of time in the verb gradually crept in to supplant the earlier concept of aspect.

Our moods, which present an action as definitely occurring (indicative), conceived of as possible (subjunctive), ordered (imperative), or non-committal (infinitive), are extended by other languages into optative (wished for), causative (made to take place), inceptive (beginning), etc. Some languages have a complete negative conjugation, running side by side with the affirmative (Japanese *ikimasu,* "to go," *ikimasen,* "not to go").

In the matter of voice, there is strong reason to believe that our active (subject acts) and passive (subject is acted upon) were originally an active and a middle (subject acts on or for himself). Sanskrit and Greek, which have all three voices, indicate the transition from the middle to the passive concept. The Latin passive (*amatur,* "he is loved") seems to be merely an extension of an originally impersonal form (*itur,* "it is gone," "there is a going," "someone goes," very similar to the Japanese *ikimasu*).

If there is one general conclusion to be drawn from these few illustrations of grammatical forms and concepts, it is that they have almost infinite multiplicities of which no one language exploits more than a small fraction. No grammatical concept seems to be *per se* sacred or universal, far less indispensable. The system of separate parts of speech, so beautifully suited to the early Indo-European tongues, falls by the wayside in many other languages. Gender, number, case, person, tense, mood, voice, so meaningful and important in our linguistic system, are either extended *ad infinitum* or utterly effaced in other

systems. Each language is a law unto itself in the matter of what it considers meaningful or necessary in the way of grammatical distinctions.

Yet by widely diverging devices, by a structural equipment no part of which is necessarily the same, all languages manage to fulfil their fundamental function, which is the transfer of meaning. It is almost as though it were not the structural device that mattered, but only the ultimate purpose.

Perhaps mankind's language runs parallel with mankind itself. The human being manages to live, whether his food is fish, rice and seaweed, or bread, butter and steak. He achieves transportation, whether by ox-cart, camel-back, horse, motor-car or airplane. He trades, whether by barter, wampum, cocoa beans, gold, banknotes or checks. He communicates with his fellow-man, whether by parts of speech, roots, inflected forms, or polysynthetic sentence-words.

Mechanically, the essential part of man is the human form, which all men hold in common. Linguistically, the essential part of language is the sound-making machinery we call speech. But what gives significance to man is the purposeful breath of life itself. What gives significance to language is meaningful transfer.

The means by which human life and activity are sustained are secondary to the purpose of life itself. They may vary and diverge infinitely in manner, but they inevitably converge in their aim. The means by which language achieves its purpose are just as infinite. It is the semantic purpose that never changes, and is common to all tongues.

THE ARRANGEMENT OF WORDS

Order is Heaven's first law.—Alexander Pope

The unit of speech is neither the individual sound nor the individual word, but the sentence, conveying a complete concept. Consequently, the unit of speech corresponds roughly to the unit of thought.

Syntax deals with the arrangement of words in this longer, more complete unit of thought and speech. Its importance is usually greater in languages that are poor in flexional endings, lesser in tongues where the word-endings carry a considerable share of the semantic burden. In Chinese, which has no flexional endings whatsoever attached to its monosyllabic root-words, the role of word-order is paramount. "I see he" differs from "he see I" only in the relative position of the words. In a tongue like English, where some flexional endings survive, morphology and syntax may be said to play complementary roles in bearing the burden of meaningfulness. In highly inflected tongues, like Sanskrit and Latin, word-order plays a somewhat secondary part, though it is frequently utilized to indicate relative emphasis on words. In a combination like *Petrus Paulum videt,* it is immaterial in what order the words are arranged; but conventionally whichever word comes first bears a larger portion of the sentence-stress. *Petrus Paulum videt* stresses the doer of the action: *"Peter* sees Paul." *Paulum videt Petrus* stresses the receiver of the action: "Peter sees *Paul." Videt Paulum Petrus* stresses the action itself: "Peter *sees* Paul."

Some languages, however, seem to combine a more or less fixed word-order with a full set of word-endings. It is probable that the word-order of these languages arose rather as a matter of habit and convention than out of necessity. Yet these languages, more rigidly

bound by their morphological structure, preserve a measure of syntactical freedom which may be used at will for purposes of stress, rhetorical effect, or poetic license. In modern English, a construction like "me sees he" is almost inconceivable; in Russian it is at least possible, though not customary.

Syntactical inversion is still effectively used in some modern western languages to reveal emotional content. A Spanish-language film, for example, bears the title *Vuelven los García* (*The Garcias Come Back*). Spanish could just as easily place the subject before the verb, which is, indeed, the more common construction; but the inversion lends to the context a feature of suspense and animation, of barely suppressed excitement, that would be lacking in the more sober subject-verb arrangement. In like manner, French exceptionally says: *"Ton frère, je l'ai vu hier"* ("Your brother, I saw him yesterday") in the place of the ordinary: *"J'ai vu ton frère hier."* Here we have not merely additional stress on "your brother," but also a feature of emotion and animation.

The syntax of the common man is of an elementary variety as contrasted with that of the more cultured person. Spoken-language syntax is normally less involved than written-language syntax. The ultimate in syntactic complexity is achieved by the political, literary or scientific writer who needs precise linguistic distinctions to represent involved thought-complexes. It is probable that at the time when Cicero and Virgil were composing their long-winded orations and verses, the Roman man-in-the-street was speaking for the most part in short, simple sentences, encumbered with a minimum of complicated modifiers and subordinate clauses. The same situation holds essentially today.

A distinction must therefore be made in syntax, far more than in phonology or morphology, between what is popular and what is learned, what is colloquial and what is literary. The complexities of syntax as we know them from English or Latin grammar pertain rather to the written, cultured, even literary and poetic language than to everyday speech. It is for that reason that syntactical studies are often avoided by "pure" linguists, who want to concern themselves with what is truly and properly language, preferably of the spoken,

colloquial variety, whereas they are favored by philologists, whose domain ranges over literature as well as language.

It is customary among "pure" linguists to assert that since the normal flow is from the spoken to the written language, and from the popular to the literary language, their interest in literature as a reflection of language is necessarily limited. What they forget is that the current of language is more often alternating than direct. Very many terms, expressions, even syntactic constructions, not to mention figures of speech, of which Shakespeare is said to have known and used two hundred, have their beginning in some form of literary composition, and find their way thence into the spoken popular language. This process of language-change has its best exemplifications in the field of vocabulary, but there is enough of it in syntax to permit us to discuss it in this chapter.

Students of Romance languages often wonder at the fact that while French, Spanish and Italian show very clear and unmistakable similarities of syntactical usage, they nevertheless diverge on such points as the use of "to have" or "to be" with certain intransitive verbs (French and Italian say "he is come" while Spanish and Portuguese say "he has come"), the agreement of past participles with a direct object, or the use of a progressive construction like "I am speaking," which is permissible in Spanish or Italian, but not in French. In the older period of these languages, there was equal confusion and fluctuation in all of them with respect to these points. The confusion still exists today among the more untutored speakers, but only to a limited degree. For the most part, the speakers of these languages have, in the course of generations, adapted themselves to the pronouncements of their respective Academies, which came out at different times with different and often arbitrary rulings. These pronouncements were at first followed only by the literary; then by the literate; ultimately, as education spread, by an actual majority of the speakers of each language. Examples of this kind could be multiplied. If, in the long run, constructions like "I ain't got none" and "Them's them" disappear from our own spoken language, they will justly be said to have bowed to the written, even to the literary tongue.

This interchange between the spoken and the written language takes place wherever a written language exists. The only spoken

tongues that escape literary influences are those that have no written counterpart; and these are growing fewer all the time.

The written-tongue tradition brings a stabilizing influence to language, slowing its rate of change by creating standards which both writers and speakers feel impelled to follow, and by giving rise to concepts of "correct" and "incorrect" speech which, however arbitrary they may be at the outset, soon receive the sanction of tradition and social custom.

The language of poetry frequently reflects a syntactical freedom which the colloquial tongue has relinquished. Old King Cole may call for his fiddlers three in poetry, but not in prose. Poetic license, which many take to be the occasional violation of the traffic rules accorded to writers otherwise bound by the regulations of rhythm and rhyme, may also be viewed as a modern extension of archaic conditions, when the abundance of flexional endings permitted a greater range in word-order.

Syntax, popular or cultured, shows at least as much diversity from one language to another as does morphology. What is correct usage in one language is often incorrect in another, even of a closely related group. "It is me" is perfect, indeed compulsory syntax in French, though English grammarians frown upon it. But Spanish and Italian, the sister-languages of French, say: "(It) am I," a construction which French once had, but later discarded.

English morphology is relatively simple; English syntax is correspondingly involved, though this may not be apparent to the speaker who has grown up with it. It makes quite a difference whether we "see through something" or "see something through," as was discovered by the French translator who rendered H. G. Wells' *Mr. Britling Sees It Through* by *M. Britling y voit clair*. To such purely syntactical instances may be added those combinations in which morphology enters to confuse the semantic issue, like "look over" and "overlook," "take over" and "overtake," "stand with" and "withstand."

In morphology, we discovered that no grammatical concept or form is universal or indispensable. This also holds true of syntax. An elementary subject-verb-object arrangement, while common to a large number of languages including such widely separated ones as English and Chinese, is rejected in many parts of the world. The subject regu-

larly follows the verb in the Celtic tongues. The Caucasian languages turn what to us is an active construction into a passive one; "I make my father happy" becomes in Georgian "Through me contented makes self father." The relative clauses which are among the most common of the subordinate clauses in our western languages are often avoided in others through the use of participles: "He looked like a man who had lost hope" would in many tongues appear as "He looked like a man having lost all hope." There is nothing sacred about our custom of putting adjectives and adverbs before the nouns or verbs they modify, as is well known by anyone who has studied a Romance language ("the house white," not "the white house"). Even the definite article, as has been seen, is subject to being placed after instead of before the noun, while prepositions can easily turn into postpositions, of which we have a few in our own language, though we don't like to admit it ("lengthwise," "skyward" are simple illustrations). The verb may assume any position in the sentence, or be relegated to a fixed post which may come at the beginning, in the middle or at the end of the sentence, or absorb most of the other elements of the sentence (in Arabic the object pronoun is appended to the verb, while in Basque and some American Indian languages the verb incorporates both subject and object).

The morphologico-syntactical forms of the verb take on extremely delicate shades of both usage and meaning in the various tongues. Parallel past tenses, like "I saw" and "I have seen," occur in most of the western languages, but there are no two languages in which they are used in precisely the same fashion.

Circumlocutions to indicate time or mode of action are numerous. Modern French cannot literally express "I am doing," but has evolved a construction "I am in train of to do." Spanish, Portuguese and Italian normally avoid the passive ("books are sold") by using a reflexive construction ("books sell themselves"). Rumanian says "I want to go" for "I shall go." The future of the other Romance languages was in origin a contraction of the infinitive and the verb "to have" ("I to go have," *ego ire habeo, j'irai*). Our own "shall" and "will" once conveyed not the future idea, but the notion of compulsion or willingness.

Stress upon a certain portion of an extended period of time is

conveyed by different devices. English says: "I have been here for two hours," emphasizing by the tense used the fact that the action began in the past; but most other languages say: "I am here since two hours," stressing the fact that the action still goes on, and this syntactical arrangement is commonly offered by foreigners speaking English.

The forms of negation and interrogation are particularly interesting by reason of their diversity. One of our own syntactic slogans is to the effect that "two negatives make an affirmative." This is not at all true in the Romance languages, where such expressions as "I didn't never see nobody" are standard.

English stands alone in its use of "do" as a negative and interrogative auxiliary. No other modern tongue, to this writer's knowledge, says "I *do* not speak" or *"Do* you speak?," constructions which may possibly have been influenced by an intensive use of the verb "do" in Old French, which later discarded the construction.

Many languages, including our own, invert the order of the subject and verb to make the sentence interrogative ("Is John here?"). Chinese and Japanese never do this, but use instead an interrogative particle at the end of the sentence, which is like a spoken question-mark. Esperanto uses an interrogative particle at the beginning of the sentence, while Spanish, in written form, indicates both questions and exclamations by the use of inverted question- and exclamation-marks at the beginning of the sentence. Russian uses both inverted order and an interrogative particle, unless a clearly interrogative word like "when," "where" or "who" starts the sentence.

The foregoing examples, few and scattered as they are, indicate the range and diversity of the syntactical devices that have been elaborated by the world's many languages in the course of their history. As in the case of sounds, words and grammatical forms, the conclusion is forced upon us that there is no standard syntax, even of the most elementary variety, that is common to all tongues. The possibilities of syntactical arrangement are as endless as are those of sound-combinations or morphological forms.

Syntax, more than any other compartment of language, lends itself to the purposes of connected, complex thought and its communication. It is an essential part of that physiological-psychological machinery whereby man transfers his ideas to his fellow-man. But where pho-

nology, morphology and vocabulary are of particular interest to the linguist, syntax transcends the narrower field of linguistics and acquires paramount importance in the more elaborate divisions of communication—rhetoric, literature, prosody. Syntax is the essential ingredient of that elusive literary element called style. It is primarily by his syntax that the stylistic speaker or writer distinguishes himself from his fellows.

At the same time, language, even in its more elementary reaches, cannot exist without syntax. The delicate shadings of literary syntax, like the broader, general outlines of the word-arrangement of the popular spoken tongue, serve the one essential aim of conveying meaning, which reveals itself more and more to be the primary function and purpose of language.

SEMANTICS AND SEMANTIC CHANGE

Language exists only when it is listened to as well as spoken. The hearer is an indispensable partner.—John Dewey

Upon the ability to translate ideas and political policies into terms that have the same meaning to all who use them depends the outcome of the peace of the world for all time.—EDITORIAL, "In the Beginning Was the Word," *Saturday Review of Literature* (October, 1941).

As the science of meaning and its transfer, semantics naturally includes all of the compartments of language, spoken, written, gestural or symbolic. Semantics is "language" in its broadest, most inclusive aspect. Sounds, words, grammatical forms, syntactical constructions are the tools of language. Semantics is language's avowed purpose.

There is nothing illegitimate about selecting one of the compartments of language as a field of special study; but all specialization in phonetics, phonemics or phonology, in morphology and grammatical forms, even in lexicology, word-history and literary style should be accompanied by a realization that from the standpoint of language these fields are necessarily incomplete and complementary, each of them contributing only a share to the ultimate picture of language.

Meaning and its transfer are indissolubly linked with psychology, both of the individual and of the mass. The science of mental processes being still in its infancy, we ought not to be astonished to find that there is a great deal about language, its past origin and growth, even its present evolution, that is not yet clear and perhaps never will be. The true linguist avoids, to the best of his ability, the know-it-all attitude, since he realizes that in his field, as in all fields of human knowledge, what is definitely known and provable is only a very small portion of the entire truth.

As a leading linguist has rightly remarked, a truly complete system

of meaning involves an analysis of the universe. All that the linguist can do is to deal with language, based only upon that analysis of the universe which is completed during the life of the individual speaker or, at the most, of the speaking community.

The meanings of all the utterances of a linguistic community are said by the same authority to include the total experience of that community: arts, sciences, practical occupations, amusements, personal and family life.

Here, however, we run into certain difficulties. To begin with, no two individuals have precisely the same life-experience. Even granting that they have at their disposal the same equipment of semantic expression (sounds, words, grammatical and syntactical forms), these means of expression will fail to coincide to approximately the same degree as the individual experiences differ. A word or sentence is not merely a bundle of sounds; it is also a bundle of associations. These associations are not quite identical for any two speakers; neither will the words or sentences hold for them exactly the same semantic content.

In this, there is a striking parallel to speech-sounds, the mechanical tools of language, and to vocabulary, the word-equipment of the individual. No two individuals produce precisely the same sounds; no two individuals have precisely the same stock of words; no two individuals derive precisely the same shade of meaning out of the same utterance.

But there is more. We assume that we can express everything in language. This is not true. A contemporary writer who is also a keen observer of language states that "the things one loves, lives and dies for are not completely expressible in words," and that "to write or speak is almost inevitably to lie a little."

Another, older writer compares our use of language to convey our thoughts to trying to mend a watch with a pick or paint a miniature with a mop. Words, he claims, are "parvenu people as compared with thought and action."

These considerations are basically true. They apply primarily to individual words, like "love" and "hate" (how can even a lexicographer attempt to define them so that they will convey all the shades of meaning of those who use them?). They apply also to broader concepts, expressed in phrases or complete sentences. " 'My country,' " says Gide, "will not suggest the same landscape to peasants in Picardy or

Provence, to the plow-man and the poet, the poor and the rich. But it is a rallying-cry, and all rise to defend it, though the peasants are actually defending cultivated fields, the poets culture in general, the manufacturers industrial wealth, the stockholder his dividends."

The strictly historical process of semantic change, whereby words and expressions vary and even reverse their connotations in the course of time, will be discussed further on; special mention may be made at this point, however, of those linguistic forms which are knowingly and deliberately invested with certain meaning-associations for the purpose of turning them into vehicles of specialized, directed, or distorted thought.

Theodore Roosevelt once spoke of "weasel words." Since his time, we have had "pacification" used in connection with the bombing of defenseless towns, "transfer of populations" or "rectification of frontiers" for mass-deportations, and "elimination of unreliable elements" for imprisonments and shootings. Such words and expressions have of late multiplied, particularly in the field of politics and international relations, but, to a surprising and generally unsuspected degree, in other fields as well. In the former, they go to swell the vocabulary of propaganda for or against a certain principle or idea. In the latter, they become part and parcel of the jargon of individual trades, professions and walks of life, but, again in a measure that few realize, they also go to swell whatever propaganda content those professions or walks of life may contain.

The process whereby this is accomplished varies according to circumstances, but is almost always the same in substance. A word or expression is lifted out of its usual context, charged with a new meaning or set of meanings, and placed once more in circulation in an entirely different context. Such words as "liberty," "liberalism," "democracy," expressions like "freedom of the press" and "People's Republic" are glaring examples of difference in semantic content, brought about naturally, by reason of the different experience of different individuals or groups, or deliberately, to create a particular frame of mind. Often the two factors converge. It could not, for example, be expected that two nations with such widely different backgrounds and past experiences as America and Russia would naturally fall into the same definition of "liberty" or "democracy." When to the natural semantic

differences are added deliberately instilled variations of a government-sponsored variety, it is not at all surprising that the same word should not hold the same meaning for both. American "democracy" is said to emphasize the complex concept of government "by" the people; Soviet "democracy," of government "for" the people. The word "liberty," which has to us certain connotations involving individual freedoms, used to appear in the Nazi and Fascist anthems, where its semantic connotation revolved around the freedom of the national or racial group to expand at the expense of others.

It is by now a commonplace, advanced by many reputable journalists, that "one of our main barriers to understanding with the Soviets is a semantic crisis." We do not understand the semantic content of Marxian terminology, and the Russians do not understand our western thought-concepts, in spite of which we both persist in using what at first glance seem to be identical words.

This semantic divergence is not a historical novelty, as is shown by the disputes among the ancient Greek philosophers and the theologians of the Middle Ages. Also, it would be a mistake to think that it can occur only across national and linguistic boundaries.

Within our own political life, attention has been repeatedly called to the growth of a vocabulary of clichés, each of which bears its own load of specialized and often complex meaning. Such terms as "Fascist," "reactionary," "progressive," "bourgeois," "Red-baiting," such rigidly formalized, ritualistic adjectives as "forward-looking," "clear-thinking," "peace-loving," "freedom-seeking," expressions like "to further positive, constructive aims" or "to engage in irresponsible, destructive criticism," have become part of the verbal ammunition of some of our political parties, to the point where some groups accuse others of carrying on a semantic war and creating a state of mind described as "logophobia," the fear of being labelled with a certain word.

But this is far from being a merely political process. The field of commercialized hygiene has given extended connotations to "B. O.," "halitosis," and other sloganized expressions. The field of art has its semantically charged words, like "abstract," "objectivism," "formalism," "decadent." Even a seemingly harmless combination like "modern art" recently had to be changed to "contemporary art" because, in the

words of those who made the change, "modern" used in connection with "art" "lent itself to double-talk, opportunism and chicanery." In other fields of human activity we find meaning-charged words and expressions like "unfair," "maladjusted," "underprivileged," "insecure," "racial minorities," "discrimination," "unscholarly," "unscientific," "education for leadership," the use of each of which normally carries implications as to the user's background and point of view that far outstrip the dictionary definitions of the words themselves. The situation is described by a contemporary writer as one of "loyalty to words." But "loyalty to words" is anything but a recent phenomenon. Historical terms, like "God-fearing," "Popery," "transubstantiation," "iconoclasm," or "Tory," "Jacobin," "Cavalier" and "Ghibelline," carried in the past an equally high charge of semantic dynamite.

The semantic overcharge sometimes leads to the dropping of a word, as when a noted politician rejected for himself the term "liberal" and chose instead "libertarian," or when the Veterans of Foreign Wars decided to drop "comrade" from their terminology because of its supposed Communistic associations and use "buddy" instead. One rather remarkable incident was the protest of Czechoslovakian Communists against the use of the word "Reds" applied to them by the foreign press; this was all the more strange in view of the fact that "redness" in the Slavic languages is associated with beauty.

Instances of this sort abound historically. In both the French and Russian Revolutions, the word "soldier" was generally discarded as being associated with the old regime, and replaced by the term "warrior." The word "army," associated with the army of the Tsars, was replaced by "Red Guard" in the early days of the Soviets, though it later returned to favor (*Krasnaya Armiya,* "Red Army"); and a word was coined from it which means, all by itself, "Red Army soldier" (*krasnoarmyeyets*). The terminology associated with the Tsarist police was replaced by an entirely new set of words when the Soviets came to power, while "patriotism," a term which an early revolutionary writer said, "has become, in the hands of the reactionaries, a pretext for robbery and murder, and a term of opprobrium," was a few years later reinstated with all honors in such expressions as "the lofty patriotism of the Soviet defenders of the frontiers of their native land." The very words "Russia" and "Russian" were for a time avoided

almost completely, and even today are somewhat cautiously used, while Soviet writers occasionally debate whether Biblical clichés, like "the Gospel of the Revolution," "the Herods and Pilates of the people," "to crucify the masses" should or should not be used in a movement meant to be godless.

Closely connected with the natural or deliberate semantic charge which gets attached to words and expressions is the matter of the relativity of meaning. This is illustrated by references to be found in nineteenth-century books to the "fantastic" and "terrific" speed of trains running twenty miles an hour, or by the arbitrary definition of "antique" as something produced before 1830, as well as by the use of "free," now threatened with banishment by the Federal Trade Commission, to describe an object given in connection with the buying of something else.

Even outside these rather glaring instances, it is quite seldom that words and expressions are endowed with absolute meanings. "Hot" applied to a day in August is quite different from "hot" describing the condition at the center of the sun. "Young" is well applied to a man of forty running for President, but inappropriate for a heavyweight contender of the same age. It is this relativity of meaning, perhaps, that leads some of us to smile upon a mere "Socialist" form of government today where it would have been viewed with execration and fear fifty years ago.

The relativity of meaning becomes paramount as we pass from one language to another. This is due to the more varied backgrounds of speakers of different languages, as well as to what French writers often refer to, rather vaguely, as the "genius" of the individual languages.

The point is often made that reading works of literature in translation fails to convey the beauty, charm, etc., of the original. What is probably meant is that the areas of semantic correspondence fail to coincide, even approximately, in any two languages. This is not surprising, in view of the lack of coincidence of sounds, grammatical forms or syntactical concepts among the various tongues.

Each language has its own precise distinctions, its highly meaningful terms, which to be made clear to speakers of another language require not a translation but a full definition accompanied by explana-

tory notes. A business term like the American "overhead" is to some extent covered in other languages by such expressions as "general expenses" or "miscellaneous expenditures," but the meaning is far from the same. A prize was once offered in a group of language teachers for an exact and concise Italian equivalent of "wishful thinking," but no one got the prize. A similar prize should be offered for an English rendering of the Romance *antipatico*. A semantic distinction like the one existing in English between "house" and "home" cannot be made in many languages without having recourse to five lines of explanation or an excursion into the language of poetry where expressions like "domestic fireside" are available. The distinction between "sky" and "heaven" is difficult to make in French or Italian unless one has recourse to "paradise."

Every language is laden with idioms, constructions peculiar to that language, which cannot be literally translated into another, and the meaning of which cannot be gathered from their component parts. English "look out" for "be careful," if literally translated into other tongues, will convey only its literal meaning of "look outside." English "to run out of something," "to catch up with someone," "to be well off" are highly idiomatic. When a house "burns up" in English, it also "burns down." All of this goes to show that language is anything but logical, and that semantics cannot by any stretch of the imagination be turned into an exact science.

Add to this that language is replete with words which are throwbacks to an earlier stage of civilization, like "manufacture" (literally, "making by hand"), "manuscript" (literally "hand-written"), "to sail" for a certain destination (usually by steamer), "to ship" goods by rail or truck. Even our "sunrise" and "sunset," in the light of modern science, are semantic misnomers.

Words like the above are striking, but actually far from unusual. Very few words, except those recently coined, retain their original meanings throughout their history and migrations from one tongue to another. Out of one hundred Latin words, less than half retain in the Romance languages or in English anything like the same meaning they had in Latin. Approximately the same proportion holds for the Anglo-Saxon part of our linguistic heritage. As the experience of existence

changes from one generation to another, words change their meaning. A few examples will suffice to illustrate this.

"Infant" is originally "non-speaking," still partly true in the new connotation, but with a restriction of meaning to the young. The original meaning of "foyer" is "fireplace." A "secretary" was once a "separator," and a "secret" was what is set apart; both words come from *secretus,* the participle of the Latin *secerno* ("to separate"). "Noble" is originally "knowable"; it comes from the Latin root *gno-* ("to know"). A "person" was once a "mask"; *persona,* which can be analyzed into "through-sounding" (the sound of the voice comes through the mask), was the mask worn by Roman actors; but this mask gave them a character and a "personality." "Rival" originally meant "pertaining to a river bank"; its present meaning is due to the concept of two landowners contending for water-rights on the bank of a stream. A "comrade" is originally one who shares a room with you; a "companion," one who eats bread with you. "Meat" was once food of any kind, as evidenced by terms like "meat and drink," "sweetmeats" and "flesh-meat."

Some words manage to come close to reversing their original meaning in the course of their histories. "Brave" comes from the same root as "depraved," Latin *pravus,* which originally meant "crooked," then "scoundrelly"; but a thoroughgoing scoundrel has to have some physical courage, hence the ultimate meaning of "brave." The Romance languages have here gone even further than English, since "brave" used before the noun has in French and Italian acquired the meaning of "good," "worthy."

Our English "silly" has as its cognate the German *selig* ("blessed"), which retains the original meaning; the English transfer went from "blessed" to "blessed fool," then to "fool" pure and simple. A similar development appears in French *crétin* (from which we get "cretinism") from the Latin *christianus* ("Christian"), while in Italian *cristiano* is often used for "human being," but in a disparaging or pitying sense.

"Nice" comes from the French *niais* ("silly"), which in turn goes back to the Latin *nescius* ("stupid," "not knowing"); the English change in meaning seems to have arisen with the use of the word in expressions like "a nice distinction," meaning first a silly, hair-splitting distinction, then a precise one, ultimately an attractive one.

Latin *domina* ("mistress," "lady") largely retains its meaning in French *dame* and in the "dame" of England, which is used as the feminine counterpart of "knight" or "sir." In American slang, however, "dame" has become attached to "girl," with a somewhat free-and-easy connotation.

Studies of the earliest appearance of certain words in the language often bring to light startling semantic changes. "Measles," for example, appearing in the thirteenth century, first had the meaning of "leper" or "leprous"; both the word and the meaning came in from Old French, which had derived the word from Latin *misellus* ("wretched"). "To stump," which first appears in a document of the year 1250, has there the meaning of "to stumble over a stump." "To neck" and "to table" first appear as verbs in the year 1450, but at that time meant "to strike in the neck" and "to enter on a table." The original meaning of "face" used as a verb (1440) is "to present a bold face," while "souse," appearing in the sixteenth century, is originally "hit." "Brash," now used as an adjective, first appeared in the sixteenth century as a verb with the meaning of "to attack."

Semantic divergences occur naturally between two languages that undertake to use the same word. The two or more words appearing in different languages from the same source but with different meanings, like English "silly" and German *selig,* or English "nice" and French *niais* mentioned above, are called cognates. Deceptive cognates constitute one of the most effective stumbling-blocks in the study of a foreign language. German *Lust* is a cognate of English "lust," but has the harmless meaning of "pleasure." English "knave" and German *Knabe* have the same origin, but the latter means "boy." English "knight" and German *Knecht* are also related, but the German word means "serf." English "rent" and French *rente* have the same derivation, but the latter today means "income" (income and rent were practically synonymous in the Middle Ages, when income was derived principally from the rental of lands). The Latin *bestia* ("beast," "animal") gives rise to Portuguese *bicho,* which means "insect," to Italian *biscia,* which means "snake," to French *biche,* which is a "doe," and to English "bitch," which is a she-dog. Along with these specialized meanings, we also have *bestia, bête* and "beast," which are learned and keep the original meaning; *bestia* and *bête,* however, are also used in

Italian and French with the meaning of "stupid," while "beast" appears in English with the meaning of "brute." In the broader Indo-European field, the specialization of meaning is shown by the fact that the cognates of the English "chin" mean "cheek" in Latin, "jaw" in Sanskrit, "mouth" in Breton; and the restriction of meaning by the fact that a "deer" was originally any animal, as it still is in the German cognate *Tier;* Shakespeare speaks of "mice and rats and such small deer," but the animal we now call "deer" being particularly the object of the chase in England, the word became restricted to a single genus.

Words can easily change their rank in the course of their histories. A "constable" was originally a "stable-companion," while a "marshal" was a "horse-boy" or "horse-shoer." In medieval times, however, a constable (*connétable*) became an officer of high rank, to revert later to a mere police officer, while both high and low rank appear in "marshal" today ("Marshal of France," "town marshal"). The lofty Arabic *al-wazir,* or vizier, becomes in Spanish an *alguacil,* or policeman, and in Italian an *aguzzino,* or hangman's assistant. "Harlot" and "lewd" did not always have the evil connotations they bear today. The former was used by Chaucer in the sense of "maid-servant," while the latter once meant merely "ignorant."

One of the oldest words in the Germanic languages is "corn." But semantically "corn" has become specialized to mean "wheat" to the British, "oats" to the Scots and "maize" to the Americans. Not knowing this fact, a government agency during the war bought "corn" for European famine relief at the request of the British Government, and this bit of linguistic ignorance cost a few million dollars to repair.

The question is often asked: "What makes for semantic change?" Far more than syntax, grammatical forms, or even sounds, the semantics of language is subject to all the forces, overt and obscure, of individual and mass psychology. Each word, as has been seen, has its own semantic history, and for each change in the meaning of that word there is a definite cause, which it is usually impossible to ascertain with any degree of accuracy a few years after it has taken place. Yet the process of language-change is fundamentally the same. In the case of each semantic shift, as in the case of each sound-shift, or change in the grammatical pattern, there is usually an innovation made by an individual, deliberately or accidentally, and accepted by the group. We

have seen a single, basic word like "corn" shift its semantics in various parts of the English-speaking world. We now see the same word used with a different semantic content by teen-age groups ("Stop spouting corn!"). As in the case of the older shifts, the new acceptance of "corn" began with one individual endowed with some prestige in a limited group; once this group accepted the innovation, it spread like the ripples caused by throwing a stone into the water. Language is forever changing, and semantics changes with it.

The essential part of semantics is acceptance of a given meaning. Meaning, like all else in the realm of language, is a matter of convention. From the subjective standpoint, a language we do not understand is no language, however objective its reality may be. Human progress is based upon cooperation; cooperation can be based only on understanding; understanding, in turn, is based upon the conventional acceptance of meaning. Semantics is therefore at the very heart and core not merely of language, but of human civilization.

The International Language Bank

What we frankly give, forever is our own.—Granville

Language-sounds and grammatical forms have their own peculiar, often slow process of evolution, which is generally of an internal character. It is comparatively seldom that a language borrows a sound or a morphological ending from another tongue, though there are among linguists some confirmed believers in the "ethnical substratum" who hold that when speakers of two different languages come in contact they are bound to influence one another's pronunciation and even grammar. In the latter field, the theory is fairly easy to disprove, since the written language normally affords a good record of grammatical change. In the matter of sounds, the question whether languages borrow from one another is still very much in the controversial stage. Substratum supporters believe, for instance, that when the Romans conquered Gaul they taught the Celtic-speaking Gauls the Latin language, but were never able to make them pronounce it Roman fashion, and that it is the mixture of Celtic sounds with Latin words that laid the groundwork for the ultimate development of French and its distinctive sound-pattern, as differentiated from Italian or Spanish, which had different racial and linguistic backgrounds. English, in the same manner, is said to have been to some extent influenced in its sound-pattern by the coming of the French-speaking Normans. Even the peculiar intonations of our own South are said to be the result of a blending of the speech-habits of English colonists with those of Negro slaves who originally spoke West African languages. Non-believers in the theory of the ethnical substratum and linguistic sound-blending, on the other hand, point to the fact that in South America, where the

American Indian languages are still very much alive, there is no noticeable influence of these languages upon the sound-pattern of the Spanish imported by settlers from Spain. They also point out that in the United States immigrant accents tend to die out completely within a generation or two, leaving no trace on the English of the localities where immigrant groups abound.

With regard to the other two great compartments of language, syntax and vocabulary, there is unanimity among linguists as to the mighty validity of the borrowing-process. Numerous examples are on record where syntactical constructions have been borrowed by one language from another, particularly in cases where the latter had achieved a higher degree of civilization and development. The first document of a Teutonic language, Wulfila's fourth-century Gothic translation of the Bible, displays wholesale borrowing of syntactical constructions and arrangements from the original New Testament Greek.

Far more than sounds, grammatical structure, or syntactical patterns, languages tend to borrow individual words. This process of word-borrowing is so extensive and general that it has become a familiar commonplace to all, specialists and laymen alike. No one needs to be reminded that *Blitzkrieg* and *Gemütlichkeit* have come into our language from German, *hôrs d'oeuvre* and *à la carte* from French, *fiesta* and *sombrero* from Spanish, *obbligato* and *ravioli* from Italian. The operation of the word-exchange has been likened to that of a vast international bank, which places the currencies of all countries at the disposal of all the rest, with the added ideal feature that what is borrowed need never be repaid, save perhaps in kind.

Of special interest are the many loan-words that are shunted back and forth from one language to another. The Italian *palla* ("ball"), came into Italian as a loan-word from the Germanic Longobards, and is cognate to our own word; as part of the name of a game, *pallamaglio,* it found its way back to one of the Germanic countries, England, where it assumed the form "Pall Mall"; then it came to Italy once more as the name of an American cigarette. "Apache" is the name of an American Indian tribe; the French appropriated it for their fierce underworld gangsters; then the word, in its new "gangster" connotation, came back to America.

Some languages show a certain amount of resistance to foreign loan-words. German, for example, prefers the loan-translation, adopting the idea of the foreign word, but substituting its own equivalent roots for the foreign roots, as when *Ausdruck* is coined on the mold of Latin *expressio,* or when *Fernsprecher* ("far-speaker") replaces an earlier *Telephon* (from the Greek for "distance-sound"), or *Wasserleitung* ("water-leading") an earlier *Aquaedukt,* borrowed from Latin. English occasionally uses the loan-translation process, as when "shorthand" goes side by side with "stenography" (Greek for "narrow-writing"). But English is definitely among the languages that welcome all comers from abroad.

There are many such languages. Persian and English have borrowed over half their vocabularies from foreign sources. The vocabulary of Albanian has only about eight per cent of native Albanian words, with the rest taken from Romance, Turkish, Greek and Slavic. Armenian has only twenty-three per cent of native words, with the rest from Parthian, Greek, Arabic and Syriac. In a count of 551 Turkish words, 251 only were found to be of native Turkish origin; of the rest, 235 were Arabic, 51 Persian and 14 Romance.

Even the Romance languages, which boast of their direct descent from Latin, are studded with non-Latin words. In a French etymological dictionary listing 4,635 root-forms of the French language, 2,028 are Latin, 925 Greek, 604 Germanic, 96 Celtic, 154 English, 285 Italian, 119 Spanish, 10 Portuguese, 146 Arabic, 36 Hebrew, 4 Hungarian, 25 Slavic, 34 Turkish, 6 from African tongues, 99 from assorted Asiatic languages, 62 from American Indian languages, and 2 from Australian and Polynesian. Despite the Romance classification of French, Romance, including Latin, Italian, Spanish and Portuguese, has contributed a bare majority of the words.

All of the western Romance languages borrowed many words from the Germanic invaders, including the names of the cardinal points of the compass (east, north, south, west), which might indicate that the Germanic invaders had a better sense of direction than the Romans, and, for some mysterious reason, the names of most colors, though the Romans were far from color-blind. Rumanian, the eastern Romance language, took very little from Germanic, but in return picked up a great deal of vocabulary from the Slavs.

The original basis of English is Anglo-Saxon, a language of the Germanic or Teutonic branch of Indo-European. Yet a straight vocabulary-count from the dictionary will show that barely forty per cent of English words are of Anglo-Saxon origin. The rest are borrowed, primarily from French, Latin and Greek, but also from practically every tongue under the sun. On a straight vocabulary-count one would therefore have to classify English as a language of international origin. But here another factor comes into play, the relative frequency of occurrence of words, and it is under this heading that our Anglo-Saxon heritage comes into its own. The Anglo-Saxon element in English comprises a large number of extremely high-frequency words, like the articles "the" and "a" or "an"; prepositions, conjunctions and adverbs like "of," "to," "for," "by," "in," "and," "but," "if," "fast," "slow," "well"; common verbs, adjectives and nouns like "go," "come," "eat," "see," "bad," "good," "high," "low," "bread," "hand," "sea," "land." The over-all result may be gleaned from the following random examples:

In an ordinary English letter, words of Latin or Greek origin are about fifteen per cent of the total; in a literary or scientific work, they run up to over thirty per cent. The Preamble to the Constitution contains twenty-five words of Latin and twenty-eight of Anglo-Saxon origin; the latter, however, contain five repetitions of "the," two of "to," two of "for," two of "of" and three of "and." A count of words used in subway advertising and directional signs shows seventy per cent to be of Anglo-Saxon origin, thirty per cent from other sources; the Anglo-Saxon words include the usual connective words of very frequent occurrence; if the count is restricted to nouns, verbs, adjectives and adverbs, the proportion is closer to fifty-fifty.

We should not be misled into thinking that all short, pithy, common words are Anglo-Saxon, and that only three- and four-syllable words come from foreign sources. Words like "very," "air," "hour," "cry," "oil," "cat," "pay," "piece," "box," "face," "poor," "dress," "push," "fine" are of foreign origin, despite their native appearance and common use.

Such examples arouse questions. Do words, when they migrate from one language into another, behave as people do under similar circumstances? Do they remain alien in appearance, or do they take out citizenship papers? Some do one thing, others the other. Gen-

erally speaking, words that enter a language at an early period, before conscious cultural influences begin to make themselves generally felt, are quickly and thoroughly assimilated. "Cheese," "street," "mint," "kiln," place-name endings like "-minster" and "-chester," came into Anglo-Saxon from Latin long before the Norman Conquest, mingling with such native words as "wassail" and the *hal beo thu* ("whole be thou") which ultimately gave us "hello." Most laymen would set such words down as native English, even if they knew the Latin equivalents from which they once sprang (*caseus, strata, moneta, culina, monasterium, castrum*). In early, popular, non-cultural borrowings the tendency of the borrowing language is not merely to appropriate the foreign words, but to make them conform to its own speech-habits and sound-patterns, even to its own laws of accentuation; Old French *verai*, for instance, was stressed on the last syllable, like most French words, but the English "very" to which it gave birth shifts the stress to the initial syllable, in accordance with the general custom of the Germanic tongues.

Later borrowings were often less popular and spontaneous, and occurred under the influence of learned people, clerics and monks in the Middle Ages, scholars and lexicographers in the Renaissance, scientists and educators in modern times. At this point, a definite attempt is usually made to retain some of the foreign flavor of the appropriated word, which remains more or less an alien in our midst. "Bishop," for example, is a thoroughly anglicized, naturalized version of Greek *episkopos*, but "episcopal," coming from the same source, retains its Greek appearance. "Frail" is naturalized, "fragile" is alien; both come from Latin *fragilis*. "Palsy" and "paralysis," "minster" and "monastery" are other sets of doublets, twin words coming from the same source, of which one has acquired native form, while the other remains somewhat foreign in appearance. Occasionally we find triplets ("spice," "specie," "species"), quadruplets ("jaunty," "gentle," "genteel," "Gentile"), and even quintuplets ("desk," "dish," "dais," "disc," "discus").

It is but natural that words should have the greatest chance of being adopted when the object they denote does not already exist as a word in the borrowing language, as is the case with Zulu "assegai," Australian "boomerang" and American Indian "wigwam." Very often,

however, a language gives up its own native word in favor of an adopted alien, as when Latin speakers renounced *galea, albus* and *bellum* ("helmet," "white" and "war") in favor of Germanic *helm, blank* and *werra.* In England, before the coming of the Normans, "despair" was *wanhope* and "library" was *book-hoard.* Anglo-Saxon *ynwit* was replaced by Latin-French "conscience" in the thirteenth century, but not till a book entitled *The Agenbite of Ynwit* (*The Remorse of Conscience*) had appeared. Still more frequently, both the alien and the native word remain, becoming synonyms that enrich the language's vocabulary, like Anglo-Saxon "shun" and Norman-French "avoid," or "knighthood" and "chivalry."

Languages often borrow words used as prefixes and suffixes, and then proceed to use them in their own fashion, often producing "hybrids" against which the purists rant until they are in such common use that it is vain to rant any longer. "Automobile" is such a hybrid. Its first part is "self" in Greek, its second portion "movable" in Latin. Great outcries have been heard of late against such deformations of "automat" (Greek for "self-moving") as "photomat" and "drinkomat." On a higher plane is the objection to "genocide," which combines the Greek root for "race" with the Latin root for "kill"; "genticide" has been suggested as a non-hybrid, all-Latin substitute. A lovely hybrid is "tenderoni," coined by an American firm by combining English "tender" with the suffix of Italian *macaroni.* A good example of a hybrid in a foreign language is the Russian word for "barber," *parikhmakhir,* in which the *makhir* is the German *Macher* ("maker"), while the *parikh* is French *perruque,* from which we get our own "periwig," later shortened to "wig."

The story of English word-borrowings would easily lead us into a full-fledged dictionary of word-origins. The Anglo-Saxons began borrowing words as soon as they settled in England, and "bald," "crag," "crock," "down," "glen," "ton," "druid" and "bard" are among the words they took from the ancient tongue of the Celtic Britons. Danish raids and settlements on the English coasts led to an intermingling of two closely allied Germanic tongues; among words of Scandinavian origin in English are "cake," "call," "curl," "die," "dirt," "get," "happen," "ill," "kid," "root," "skin," "sky," "ugly," "wing" and "want," as well as the verb-form "are" and the pronouns "they," "them" and

"their." "Skirt" and "shirt" were originally the same word, but while "shirt" developed from the Anglo-Saxon, "skirt" was brought in by the Danes.

Latin words and expressions, as we have seen, began streaming into English when it was still Anglo-Saxon, and have been continuing their inroads ever since. A few that have remained most thoroughly alien are *verbatim* and *passim, inter nos, modus vivendi, persona non grata, non sequitur, lapsus linguae, summum bonum* and *terra firma.*

The Norman-French element, itself largely derived from Latin, made a vast contribution in the centuries that immediately followed the Norman Conquest, but French words have never ceased crossing the Channel. Often it is a dialectal form of French that reaches English, as is the case with most English forms in *-oon* ("saloon," "cartoon," "pontoon"), which betray their Anglo-Norman dialectal origin by their ending. "Cattle" and "chattel" both come from the French, which had derived them from Latin *capitalis;* however, "cattle," is from the Picard dialect of French, while "chattel" is from the standard language. Among older English words from French sources are "challenge" and "chance," "gun" and "engine," "jolly" (from French *joli*) and the "boon" of "boon companion" (simply *bon compagnon,* "good fellow"), "puppy" (from French *poupée,* "doll") and "assets" (from *assez,* "enough"), "taste" (from *tâter,* which means not to taste, but to grope), and "flirt" (from *fleurette,* "little flower"), "alas" (from *"Ah, las!"* in which the *Ah* is merely an interjection, and the *las* means "weary" with "me" understood), "kerchief" and "curfew" (from *couvre-chef,* "cover-head," and *couvre-feu,* "cover-fire"), "bayonet" (from the city of Bayonne, where the weapon was first manufactured) and "sabotage" (from *sabot,* a wooden shoe; the reference is to the delightful practice of disgruntled workers of throwing a shoe into the machinery, similar to our "throwing a monkey-wrench"). *Chiffonnier, blasé, ennui, de trop, noblesse oblige, belles lettres, par excellence, de rigueur, savoir faire, comme il faut, fait accompli, laizzez faire, cherchez la femme,* are among French expressions that have not taken out naturalization papers.

The Renaissance brought three great language-streams, Greek, Arabic and Italian, in contact with English. The Greek contribution has increased rather than diminished with the passing of time, turning

in recent decades into an imposing scientific and technical vocabulary which bids fair to make our language among the richest in the world. These scientific terms consist not only of words like "atom," "cyclotron," "telegraph" and "hydrotherapy," but also of prefixes like *hyper-* and *hypo-*, whose Latin counterparts are *super-* and *sub-*, and which often lend themselves to the formation of hybrid words, as when *hyper-* is attached to "tension," which is of Latin origin. But the total Greek contribution is not merely scientific and technological. Numerous Greek words appear in the popular speech. "Idiot," for example, is Greek for "private" (a thoroughly private person is abnormal, and belongs in an institution); "adamant" is Greek for "unsubdued"; "cyclone" is Greek for "coil of a snake"; "cheer" in the expression "to be of good cheer" goes back to the Greek *kara*, "face"; "paper" comes from *papyrus*, the Greek name of a sedge-grass whose pith was used as a writing-material by the ancients; "Bible" comes from another Greek name for the same material, *biblos*. Among recent Greek additions to our vocabulary which have not become naturalized is *hoi polloi*, Greek for "the many."

Arabic contributions usually, but not always, bear a distinguishing mark, the *al-* prefix that represents the Arabic definite article ("alcohol," "algebra," "alkali," "alcove," etc.). From the Arabic come "dragoman," "minaret," and even such semi-slang terms as "ballyhoo" and "so long" (the former is *b-Allah hu*, "by Allah it is"; the latter is *salaam*, "peace," borrowed by Malay in the form *salang*, then brought to Britain by colonial troops).

Italian offers us the names of most of our military units and ranks, coined by the Italian *condottieri* of the Renaissance ("battalion," "regiment," "brigade," "infantry," "cavalry," "artillery," "corporal," "captain," "colonel," "general" and "generalissimo," even the loan-translation "free lance"), along with a wealth of words dealing with all fields of life, art, literature and music, like "ballot" and "garble," "balcony" and "façade," "sonnet" and "gazette," "burlesque" and "cavalcade," "dilettante" and "replica," "miniature" and "sketch," "model" and "studio," "falsetto" and "a cappella," "staccato" and "scenario," "piccolo" and "viola," "farina" and "semolina," "fiasco," "vista," "bravo" and "dolce far niente." Two curious Italian importations are the seeming loan-translation "skyscraper" (the English term first appears in

America in 1891; the Italian equivalent, *grattacielo,* applied to person, not a building, goes back to 1252), and the exclamation "Dear me!," which seems to be an adaptation of the Italian *Dio mio.* The suffix *-esque* of "picturesque," "arabesque," etc. is also of Renaissance Italian origin.

The centuries of the modern era have brought to the English language words from practically every language in the world, often in exceedingly round-about fashion. "Grippe," for instance, comes to us from French, but the word seems to be originally Russian, where *khripota* is "hoarseness" and *khripyet'* is "to have a rattle in one's throat"; the word appears to have travelled westward in the eighteenth century, when Russian troops occupying Berlin brought the disease with them. On the other hand, "knout" (*knut*), the whip-lash, comes to us from Russian, but the word originally came to Russia from Germany, as evidenced by the German diminutive *Knüttel* ("cudgel"). "Ghetto" is an Italian word, but seems to come from a Rabbinical Hebrew *get* ("divorcement"), indicating the isolation of the Jews from the rest of the population. "Checkmate" is from the Persian *shāh māt,* "(the) king (is) dead"; "chess" is from a French derivative of the first part of the Persian expression (Old French *esches*); "check," "checkers," "exchequer" are all from the same source. "Panzer," which came to us from German during the war, was borrowed by medieval German from Italian *panciera* ("breast-plate," "paunch-armor"). If it is true that "babe" and "baby" come from "babble," then the word goes back to the Semitic Akkadian *Bab Ilu* ("the gate of the god").

From kindred Germanic languages of the Scandinavian group there have come to us words like "geyser," "saga," "ski" and "slalom." Dutch has contributed such expressions as "blunderbuss," "veld," "spa" and "forlorn hope" (*verloren hoop,* "lost troop"). Yiddish has given us "fooey," "kibitzer," "it shouldn't happen to a dog" and "what's with you?" German, after contributing naturalized words like "haberdasher" (*habt Ihr dass, Herr?,* "have you that, sir?"), "meld" and "sauerkraut," alien forms like *Sprachgefühl* ("feeling for language") and *Langlauf* ("long run," a skiing term), a military command like "Halt!" (which in native English is "Hold!"), and American slang terms like "cranky," "fresh" (in the sense of impudent) and "spiel," made an abundant though not particularly welcome recent contribu-

tion in "flak" (an abbreviation for *Flugzeugabwehrkannonen,* "anti-aircraft guns"), *Anschluss, Gauleiter, Führer, Lebensraum, Luftwaffe, Wehrmacht, Gestapo* (an abbreviation for *Geheimstaatspolizei,* "secret state police"), and *Kommandantura,* itself borrowed by German from a Romance source.

From Japanese there came to us in recent years such terms as *bushido* ("the warrior's code"), *Nisei, Domei, samurai, kamikaze* and *zaibatsu;* from Russian *soviet, Kremlin, tovarisch, kolkhoz, kulak* and *Stakhanovite,* as well as the *commissar* and *intelligentsia* previously taken by Russian from Romance. Chinese has contributed "tycoon" and "tea," *chi pao* and "shantung," "chop suey" and "chow mein." From India we have "rajah," "ranee," "nabob," "mahatma," "guru," "yogi" and "khaki"; from Spain "guerrilla," "camarilla," "caudillo," and a loan-translation, "fifth column"; from Latin America "gringo," "vaquero," "pampa," "hacienda," "rodeo," "ranch," "burro," "picka-ninny," (*pequeño niño,* "small child"), "maraca," "carioca," "conga" and "zombie." These lists could be extended indefinitely, both as to words and languages.

To the question: "What have others borrowed from us in return?" the answer is long indeed. French has taken, without change of form or meaning, our "baby," "bridge," "club," "film" and "sandwich"; "wagon" has acquired in French the meaning of "railway coach," while *boxe* and *bouledogue* are the forms assumed by "boxing" and "bulldog." Latest accretion to the French vocabulary from English is *niou louque,* which will be recognized by some as "new look." Italian has taken "cold cream," "football" and "nylon" and turned them into *colcrem, futbol* and *nailon.* Mexican Spanish calls a rail-bus powered by an old engine *calamazo,* because the name of its place of manufacture, "Kalamazoo" appears on it; the man who run it is a *calamacero,* and a collision in which it may become involved is a *calamazazo. Khuligan* and *khuliganizm* are the forms given by Russian to English "hooligan" and "hooliganism" (the name was originally that of a very ill-behaved Irish family living in Southwark, London). But in addition, Russian is replete with English words, particularly of a technical nature. The sporting, particularly the baseball terminology of both French and Spanish is almost bodily lifted from English, from the

alien *baseballeur* ("baseball player") to the loan-translation *tuez l'ar-bitre* ("kill the umpire"), and from *beisbol* to *jomrón,* which is pro-nounced and means "home run." Latin America has adopted such institutions as "cocktail," "ginger ale" and "tea and pound-cake," which assume the form *coctel, lleñeral* and *te y ponque.* Japanese has taken from us words in the most diversified fields, giving them its own spell-ing and pronunciation (*birujingu* from "building," *teiburu* from "table," *suteishon* for "station," *basu* for "bus," *matchi* for "match," *dansu* for "dance" and *pikunikku* for "picnic"). Chinese transcribes our "poker" as *p'u k'e,* and our "humor," which is apparently different from the Chinese variety (called *hsiao hua,* "laugh talk"), as *yu meh,* while "telephone" has become *te lu feng,* though there is also a more in-digenous *tien hua,* which literally means "lightning talk."

Is a language better or worse off for admitting all comers to citizen-ship? Here perhaps again a parallel with human beings is instructive. No language is "pure," as no race is "pure," with the possible excep-tion of a very few minor and backward tribes and their tongues. Among western European groups whose known histories indicate maximum racial and linguistic intermingling are the British, the French, the Italians and the Spaniards. To judge from their achieve-ments, culture has suffered no setback from either racial or linguistic intermingling.

Yet the specter of linguistic "purity" rises periodically to haunt the speakers of these and other languages. Mustapha Kemal undertook to purify the Turkish language of its Arabic and Persian loan-words, but the task proved impossible, since they constitute over half the Turkish vocabulary. A certain measure of linguistic purification is in operation today in the Soviet Union, where *internatsionalniy* ("interna-tional") has been replaced by *mezhdunarodniy,* and *eksperimentalniy* ("experimental") by *opiytniy.* The results are not impressive. The Italian Fascists tried to eliminate from the Italian language certain international words because of their supposedly foreign origin, and replace them with "Italian" words, with the ludicrous result that "hotel," "menu" and "chauffeur," words of Latin origin, even if they had reentered Italy from France, were replaced with *albergo, lista* and *autista,* of Germanic or Greek origin.

At various times, purists have tried to purge the English language of words of foreign origin, replacing them with Anglo-Saxon roots. One slogan created by these linguistic nationalists was: "Avoid Latin derivatives; use brief, terse Anglo-Saxon monosyllables." The joke is that the only Anglo-Saxon word in the entire slogan is "Anglo-Saxon."

THE GREAT LANGUAGE MINT

Language is not an abstract construction of the learned, or of dictionary makers, but is something arising out of the work, needs, ties, joys, affections, tastes, of long generations of humanity, and has its bases broad and low, close to the ground.—Walt Whitman, "Slang in America"

There is a Greek word, "onomatopoieia," which literally means "name-making." The term has been, rather unfortunately, appropriated by some linguists to designate the creation of words which are supposed to imitate sounds heard in nature, like "buzz," "chug," "clang," "coo," "fizz," "gurgle," "purr," "zip" and "zoom," or the recent and still slangy "yakity-yak" and "blah" for "idle chatter." The word "unfortunately" is used in the previous sentence on two separate counts. First, the connection between the sound and the word is often more imaginary than real, as shown by the widely divergent forms that the same natural sound takes in different languages; in French, for instance, a dog does not go "bow-bow," but *"oua-oua,"* while in Italian he goes *"bu-bu";* a turkey in France goes not "gobble-gobble," but *"glou-glou";* an owl does not "hoot" but *"hulule"*'s; a cat does not purr, but goes *"ron-ron";* the English mouse "squeaks," but the French mouse *"couic"*'s. The second and more important objection to the current use of "onomatopoieia" is that etymologically the term should mean simply "word-creation," without reference to the imitation of sounds. If this view were accepted, onomatopoieia would come to be recognized as perhaps the most important of the processes of linguistic change, because of all the words that exist in any language only a bare minority are pure, unadulterated, original roots. The majority are "coined" words, forms that have been in one way or another created, augmented, cut down, combined and recombined to convey new

needed meanings. The language mint is more than a mint; it is a great manufacturing center, where all sorts of productive activities go on unceasingly.

Linguists recognize a variety of processes whereby new words are added to the language. Not the least important among these is the process of sheer creation, whereby a word that did not previously exist is suddenly thrust into the spoken tongue. English lexicographers are often troubled by words for which no satisfactory etymology can be found; these words normally appear in the dictionary without the genealogy that adorns their more fortunate fellows, which are labelled as proceeding from an Anglo-Saxon or Latin or Greek or French fore-bear. These words are the illegitimate children, the bastards of the lexicological family. All that word-historians can tell us about them is that they first appeared in the twelfth or fourteenth or twentieth century; they have no seeming cognates, no apparent source, often no clear-cut *raison d'être*. Someone invented them; somewhere or other along the language's course, they met with popular favor, spread in the spoken tongue, got into literary records, and ultimately became part and parcel of the language. We may reasonably surmise that they were at first considered slang; that later they became colloquialisms; and that lastly they gained full standing, like the "blab," "tot" and "chat" which first appear in fifteenth-century English documents. Only exceptionally, in modern times, are the circumstances of the coinage known, as is the case with "Shangri-la," a place-name invented by the author of *Lost Horizon* and popularized by Franklin D. Roosevelt.

Few people realize how many such words manage to arise, gain temporary popularity, then sink back into desuetude and oblivion. There is a long list of words current in the sixteenth century which did not come down to us: "pingle" (for "fight"), "yerk" (for "hit"), "snudge" (for "be miserly"), "sdeign" (for "disdain"), "ghost" (for "die"), "daw" (for "fool"), "yuke" (for "itch"), "begeck" (for "cheat"). In more recent times, attempts to give a more clear-cut definition than "American" for an inhabitant of the United States have included "Uessian," "Usian," "Usonian" and "Unisian"; none of them took.

Other processes of word-formation and vocabulary growth have

been properly catalogued and given technical names by linguists grateful for the fact that they offer possibilities of thorough investigation. There is derivation, the process whereby an existing root is combined with established prefixes and suffixes to form new words, as when "protest" gives rise to "Protestant" and the latter in turn to "Protestantism," or when "defenestration" is coined to describe the process of putting to death by throwing from a window. A more recent example is the creation by New York Zoo authorities of "platypuserie" and "platypusorium" to describe the residence of the Australian duckbill, whose Greek name simply means "flatfooted."

There is also an opposite process, retrogressive formation, whereby a root is shorn of its prefixes and suffixes and reduced to the status of a different part of speech, as when the French verb *crier* gave rise to the noun *cri,* or when "Canterbury," to which devout Englishmen went on short pilgrimages, gave rise to "canter," or when "withdrawing room" became "drawing room."

Then there is the process known as composition, whereby two existing roots are combined to form a new word which has a meaning different from either of its component parts, like "railroad," or the more recent "rikmobile" of Shanghai, a motorized version of the ancient *jin-rick'sha* ("man-vehicle"). English composed forms that have drawn recent fire are "hair-do" and "know-how."

Second only to sheer word-creation in potency, and far outstripping it numerically, is the process known as analogy, whereby an originally "incorrect" word or form is coined in imitation of another existing and legitimate form, as when "flang" and "brang" are used as the past forms of "fling" and "bring" because, somewhere in the back of the speaker's consciousness, it is recalled that "ring" has a past "rang" and "sing" has "sang," or when words like "motorcade" and "aquacade" are coined in imitation of "calvalcade."

Lastly, in languages like English, which has lost most of its distinctive flexional endings, there is a process known as functional change, whereby a word used as a certain part of speech is, without ado or ceremony, transferred to another function. No better example of this could be adduced than the much-discussed modern use of "contact" as a verb, but the process of functional change has been going on for many centuries, ever since English ceased to be a tongue of com-

plete inflexions and became predominantly a tongue of roots; "box," for instance, which came into English as a noun shortly after the Norman Conquest, began to be used as a verb in the sense of "to fight" in the sixteenth century.

It may be noted in passing that languages that retain flexional endings have little or no possibility of functional change, but make up for this deficiency by the derivation- and composition-processes. Italian, for example, a language that still believes in flexions, has such picturesque formations as *forsennato* ("crazy") from *senno* ("sense"), *sgattaiolare* ("to slink"), from *gatto* ("cat"), *scodinzolare* ("to wag one's tail") from *coda* ("tail"); literal translations of these long words would be "outsensed," "to ex-cat," "to ex-little-tail." Spanish, another flexional language, has a splendid word for "snack" or "bite," *tenteempié*, which may be analyzed into "hold-yourself-on-your-feet."

Returning to onomatopoieia used in the sense of an imitative coinage, we find that many words are formed by a process similar to it, which involves the repetition of the original word with a change in the vowel sound or, less often, of the initial consonant. Such are "zigzag," "tip-top," "flim-flam," "ping-pong," "pell-mell," "boogie-woogie," "walkie-talkie," even "be-bop." At other times there is a process of straight repetition, but in these cases the attempt to imitate a natural sound is more noticeable; "murmur," "cuckoo," Italian *sussurro*, Spanish *chuchoteo*, French *frou-frou* are cases in point.

The connection with an idea only remotely related to a natural sound is sometimes in evidence. In English, for instance, most verbs ending in *-ash* have acquired the connotation of some sort of violent action: "bash," "clash," "crash," "dash," "flash," "hash," "lash," "mash," "splash," "slash," "smash," "thrash." At an earlier period, one Indo-European root gave rise to such diverse English words as "glad," "glass," "gleam," "glisten," "glint," "gloat," "glower" and "glare."

Derivation, retrogressive formation, composition and analogy often appear in combination. "Iffy," meaning "tentative," "uncertain" (from "if") is easily catalogued as a case of straight derivation. "Ism," a theory, usually of the political, sometimes of the crackpot, variety, and "flammable" used to replace "inflammable" because of the confusion caused by the prefix *in-*, are clear-cut retrogressive formations. But what shall one say of Gromyko's "vetophobia," which incorporates

both composition and analogy, or of "homestress" and "majorette," formed on the analogy of "seamstress" and "major," with a full-fledged process of derivation?

Many years ago Lewis Carroll jokingly suggested the creation of what he called "portmanteau words," words that would carry two meanings in one suitcase; he offered such creations as "mimsey" ("miserable" plus "flimsy") and "slithy" ("slimy" plus "lithe"). He probably did not expect to be taken up seriously, but words like "brunch" ("breakfast" plus "lunch"), "smog" ("smoke" plus "fog") and, more recently, "motel" ("motor" plus "hotel") show that his suggestion did not fall upon deaf ears. What Carroll possibly did not know was that the process he advocated had already been in operation for centuries; "clash" is originally a combination of "clap" and "crash"; "flare" of "flame" and "glare"; "glimmer" of "gleam" and "shimmer"; "smash" of "smack" and "mash." An attempt was even made to coin "upcry" out of "uproar" and "outcry."

Analogy, the process of creation by partial imitation of existing forms, is credited by some linguists with being the most powerful agent in language change. Its operation is evident not merely in the field of vocabulary, but also in that of sounds, where "marjarine" is widely used instead of the legitimate "margarine" by mental association with "Marjorie," and in that of morphology, where strong verb-forms like "drug," the original past of "drag," are turned into weak ones like "dragged" in imitation of "lag—lagged," "tag—tagged," etc.

The nature of the imitation-process in analogy is often easy to determine. "Pea," for example, is known to have been formed from an original collective noun "pease" because the latter was mistaken for a plural. "Shame-faced" was once "shame-fast" ("confirmed in shame"), but changed "fast" to "faced" by reason of a blushing connotation. Historical linguists are fond of telling the story of the medieval extension by analogy of certain suffixes like -age and -ier in French which gave rise to the family of "voyage," "mirage," "poundage," "garage" and to that of "cavalier," then, with an English change of spelling, "musketeer" and "carbineer," ultimately, with an American twist, to "racketeer" and "bonuseer." They like to expound the -ana ("Americana," "Lincolniana," etc.) which was first put in vogue by French scholarly circles of the seventeenth century.

ing of functional change. The war gave us "to Coventry" or "coventrize" and "to Quisling." More recently, UN proceedings have given us "to stonewall" the work of a committee, coined by Hodgson of Australia, and "to burke" a proposal, offered by Berendson of New Zealand. A New York columnist coined "to wallace," in the sense of to go to a foreign country and carry on political activities there.

Coinages of groups of words used in a certain sense give rise to clichés. Among such expressions created by Shakespeare are "tower of strength," "pound of flesh," "made of sterner stuff," "milk of human kindness," "every inch a king," "midsummer madness." More recent cliché-coinages are "boom and bust," "loyal opposition," "swing shift," "zoot suit," "sit-down strike," "hope chest" and "whodunit."

Glossolalia is the scientific name given to the creation of language by the insane. Often the terms coined by insane persons have a weird and peculiar charm, like *farizitocericia, sirrope, tschario, moemdiana, ariotoebilium, davidiapulom, aprovia, astraerideo, adula* and *atrobois.*

The difference between glossolalia and creative word-coinage lies in the fact that the former lacks a recognizable basis of both etymology and meaning. There is, of course, a form of glossolalia which is occasionally used by the sane for very definite purposes. It is known as double-talk, and is equally meaningless.

SLANG, CANT AND JARGON

All slang is metaphor, and all metaphor is poetry.—G. K. Chesterton

Lots of people who don't say "ain't" ain't eatin'.—"Dizzy" Dean

The term "vernacular" means the current spoken language of a given area, as distinct from the literary language. But the distinction is often extremely difficult to make, since both vernacular and literary language are characterized by social and educational stratification. This has always been true of the vernacular, less so of the literary tongue, which in the past has often tended to be far more conservative than it is today. Conservative or not, the literary language almost always gets around to reflecting the spoken vernacular, though sometimes after a considerable lapse of time. There is a continuous flow from the spoken vernacular to the literary language, and another flow, perhaps less conspicuous, from the written to the spoken tongue.

The vernacular is said to be featured by colloquialisms, vulgarisms, substandard forms and slang. This, of course, is a matter of individual choice and cultural status; also, the literary language of today may be equally so featured, as witnessed by a sporting page, a comic strip or a whodunit.

Again, the precise distinction between what is a colloquialism, a vulgarism, a substandard or slang form, or a legitimate literary form is not always easy to make. Slang words are subject to precisely the same influences and processes as ordinary language: borrowing from foreign sources (like "crank" and "cranky," which we took from the German *krank*); semantic change (like "bean" used in the sense of "head"); analogy (like "his'n," "our'n," "your'n," formed in imitation of "mine" and "thine," which have a final *n* sound); and downright coinage

(like "oomph," recently legalized by a London court for use as a trade-mark, with a decision which said in part, "It is neither archaic nor poetic, nor is it obsolete").

In all languages and at all times, some slang moves into accepted good usage, though the rate of speed of this movement varies considerably (present-day American English probably achieves the ultimate in swiftness). Shakespeare brought into current good usage such slang terms of his day as "hubbub," "fireworks," "fretful," "to bump" and "to dwindle." One-time slang-words which today have full legitimate standing are "strenuous," "spurious," "clumsy," "bogus." "Hectic," always legitimate in the sense of "consumptive," was still slangy twenty years ago in its now-current usage as "exciting."

The New Words Section of Webster's Dictionary includes neologisms and slang words concerning the ultimate survival of which there is doubt. About ninety per cent of the New Words become permanent. Among New Words still on probation are "cheese-cake" (photography of feminine shapeliness), "corny" (unsophisticated), "wolf" (rapacious philanderer), "whodunit" (mystery story), as well as "moppet," "gimmick," "snafu," "stooge" and "gremlin." Among slang words that have been admitted to the normal language within the last two decades are "blimp," "comeback," "getaway," "gun play," "joy ride," "wangle," "strip tease," "zoot suit," "soap opera," "jitterbug" and "juke box."

Slang is a very ancient phenomenon, extending back into the history of language almost as far as our records can reach. The slang use of the name of a piece of pottery for the head, similar to our "crackpot," has counterparts in many ancient languages: Sanskrit used *kapāla* (literally, "dish"), while the Latin slang use of *testa* ("pot") in the place of the legitimate *caput* ultimately gave rise to the French and Italian legitimate words for "head," *tête* and *testa*.

Plautus, a playwright of ancient Rome, made copious use, in his plays of Roman life, of the underworld slang of the *Suburra*, a quarter of Rome inhabited chiefly by gladiators and slaves. Petronius, the Beau Brummel of Nero's court, has left us an account of a dinner written in the vernacular of his period, with several infiltrations of slang. François Villon was perhaps the first poet to make extensive use of underworld slang in his works, while Bonamy, in his *Réflexions*

sur la langue latine vulgaire, first advanced the theory, later accepted by most scholars, that a good deal of information about the rise of the Romance languages was to be gained, not from the Latin of Classical literature, but from the slang of Plautus, Petronius, Apuleius and similar "substandard" writers.

Some slang forms are of exalted, even royal origin. "To sell someone to someone else" in the sense of "*to praise*" has an exact parallel in Cicero's Latin, when he writes to a friend *"valde te venditavi"* (literally, "I peddled you a lot"). "To get someone's goat" seems to be drawn from French *prendre sa chèvre,* used by Henri Estienne, a great lexicographer and philologist, in 1585. "Ain't" as a substitute for "am not," "are not" was established in current usage by King Charles II.

The word "slang" is said to be derived either from an erroneous past of "sling," or from "slanguage," with the initial *s* coming perhaps from such expressions as "thieves' language." The term was first used in England in the middle of the eighteenth century, but English literature on slang goes back to the sixteenth century, and includes a glossary in seven large volumes.

"Cant" is an older term than "slang," but there is a subtle difference between them. The latter is not at all designed to be obscure to the uninitiate, while the former is. It is therefore appropriate to speak of "New York slang," but of "thieves' cant." Concerning cant in his day, William Harrison (1586) wrote: "They haue deuised a language among themseules, which they name Canting, but others pedlers French, a speach compact thirtie yeares since of English, and a great number of od words of their owne deuising, without all order or reason; and yet such is it as none but themselues are able to vnderstand. The first deuiser thereof was hanged by the necke, a just reward no doubt for his deserts, and a common end to all of that profession." Among "the seuerall disorders and degrees amongst our idle vagabonds" listed by Harrison, the following are of note: "rufflers, uprightmen, hookers, priggers or pransers, palliards, fraters, abrams, freshwater mariners, dummerers, drunken tinkers, swadders, baudie baskets, mortes, doxes, delles, kinching cooes."

In addition to slang and cant, there is a third variety of special language, which may be called "jargon" for want of a better name,

applied to the special terminology in use in any given walk of life. Every trade, profession and business has its own special vocabulary, more or less unintelligible to people not in that line, which may run into the hundreds or even thousands of words, expressions and special meanings, as will be seen later.

Of some interest is the modern attitude toward slang. The broad-minded procedure of our modern lexicographers, who admit slang words to the dictionary on probation, is typical. Some specialists go further. A Russian linguistic congress held in Moscow in 1930 defined language-purity as a mere fiction, reflecting at best a pedantic attitude, and at worst an attitude either aristocratic or chauvinistic. This point of view is shared by some American linguists who declare that "language is what people speak, not what someone thinks they ought to speak." In accordance with this view, there appeared in an English-language booklet prepared by Army linguists for the use of French speakers the phrase: "I laid on the bed." When attention was called to this seeming misprint, it was justified on the ground that "that's the way 90% of the G.I.'s say it."

Slang, of course, includes sounds, grammatical forms and syntactical constructions as well as mere words and expressions. The points of English grammar over which the greatest controversies have raged are: the use of "I" or "me," "he" or "him," after "it's"; the use of "who" or "whom" in such expressions as "who(m) did you see?"; "ain't" used as a substitute for all present negative forms of "to be" and "to have"; and the use of "shall" and "will" to form the future. But with the exception of these and a few other glaring issues, the majority of controversial sounds and grammatical forms may be described as localisms rather than as language-wide slang, and consequently fall rather under the heading of dialect. Such is the case with "thar" for "there," "wuz" for "was," "Long Giland" for "Long Island," "boid" for "bird," "erl" for "oil," "them's them," etc. The true stamping-ground of slang is vocabulary and expressions, and while slang may be condemned by purists and schoolteachers, it should be remembered that it is a monument to the language's force of growth by creative innovation, a living example of the democratic, normally anonymous process of language-change, and the chief means whereby all the languages spoken today have evolved from earlier tongues. A great professor of languages at

Columbia University used to argue that Vulgar Latin still lives and breathes today in the spoken Romance languages. He was fundamentally right. Had it not been for the slangy leaven of Plautus and Petronius that crept into the Classical tongue of Cicero and Horace, the works of Dante, Cervantes and Molière might today appear in majestic Latin instead of in the graceful, supple tongues that have evolved from it. By the same token, Shakespeare would have used the Anglo-Saxon of Bede, Goethe the Old High German of Notker, and Ibsen the Old Norse of the Eddas.

One remarkable characteristic of slang is the creation of a large number of different words for the same thing, like "grouse," "gripe," "squawk," "beef," "bellyache," etc., for "complain"; or "simoleon," "iron man," "smacker," "buck," etc., for "dollar." For "nonsense," we have: "applesauce," "boloney," "banana oil," "bushwah," "eyewash," "hooey," "horsefeathers," "tripe" and some 250 more expressions.

Another feature of slang is the extremely large mortality of slang terms in their infancy. For every slang word that survives and becomes a part of the accepted vocabulary, there are dozens, perhaps hundreds, that serve as nonce-words, then drop into desuetude. The "kiddo" of the First World War is very little with us today. The Air Force "roger" of the Second World War has already lost much ground to its older and more seasoned competitor "O.K." The "natch" and "def" of the younger generations are now dropping out of use; so are expressions like "clock the kid" (for "look at me") and "how horrible can you get?" More than half of the French slang, *argot* and *jobelin* so glibly used by Villon is so thoroughly lost today that French philologists have to guess at the meaning of his words.

One never-ending source of slang, particularly in English, is the clipped word, which seems to stem primarily from the English preference for monosyllables. In many cases ("vet," "doc," "fan" from "fanatic," "mike" from "microphone," "phone" from "telephone") the clipped word is recognized for what it is, and the parent-word survives by its side. But often the parent-word is all but lost, as in "ham" from "hamfatter," "mutt" from "muttonhead," "bunk" from "buncombe," "bum" from "bummer." Like other slang forms, clipped words may easily acquire respectability and full standing in the dictionary; this has happened to "cab" from "cabriolet," "bus" from

"omnibus," "mob" from *mobile vulgus,* "spats" from "spatterdashes," "pun" from "pundigrion." The clipped word may come from the end or the middle of the parent-word as well as from the beginning, as shown by "van" from "caravan," "wig" from "periwig," "flu" from "influenza" and "skeet" from "mosquito." Word-clipping occasionally gives rise to bad cases of confusion, as in "gas" from "gasoline," which leaves one in doubt as to whether a liquid or a gaseous fluid is meant.

The British are given to clipping almost as much as we. "Oppo" is their word for "opposite number" (friend, pal, or wife); "demob" stands for "demobilization," and "nappies" for a word which is translated by American "diapers."

Flexional languages are less given to word-clipping. An outstanding French example is *Métro* for *"Chemins de fer métropolitains,"* the Paris subway system.

A dictionary of word-origins for slang terms is quite as legitimate as, though somewhat more difficult to construct than, an ordinary Webster's, and at least as fascinating. There are several in existence, and *American Speech,* a periodical published at Columbia University, makes it a practice to endeavor to trace every neologism to its source as soon as it appears.

A few interesting, though random, slang-word histories are the following:

"Jalopy" (old, battered car) is said to be connected with the French *chaloupe* ("life-boat"), as well as with "gallop" (there is an alternative form *galopy*), and with aviation (an ancient plane in World War One is said to have been so named).

The use of "grapevine" and "grapevine telegraph" to signify unofficial rumor dates back to the Civil War, the connection being with the many intertwining tendrils of the grapevine.

Many origins are claimed for the use of "doughboy" or "doughfoot" to denote an infantry soldier. One is "adobe," the mud of the Southwest, which the infantry got on its feet. Another is the use of pipe clay for the white trimmings of infantry uniforms, which in the rain used to turn into a dough.

The slang "cop" for "policeman" goes back to an earlier "copper." Policemen were so named because they wore metal helmets, which were made necessary by the fact that bricks often dropped from slum

roofs and windows, accidentally or otherwise, upon the minions of the law.

Three versions exist for "goon." One is the Chinese word for "stick"; a second the Hindustani *goonda* ("hooligan"). The third is a cross between "gorilla" and "baboon."

Slang "bambino," "bimbo" and "boloney" are all of Italian origin. The first two mean "child," and were originally applied to "Babe" Ruth. The last comes from the city of Bologna, renowned for its sausage.

Merhaba, the Arabic greeting, is said to have given rise to our wolf-cry "Hubba-hubba!," but the evidence is slim.

While slang words as such find it relatively easy to obtain admission to the dictionary, the same is not always true of combinations of legitimate words in slang connotations. There is nothing in "ulcer" and "gulch," taken separately, which betokens slang; their combination, however, into an expression for "cheap restaurant" is not so easily recorded. "To chew the rag," "to be a shark at," "to sling hash" consist of legitimate words; it is the connotation of the combination taken as a whole that is slangy. The British are at least as adept at this sort of thing as we. They have coined such expressions as "to carry the can" (to bear the responsibility), "it's a piece of cake" or "there's jam on it" (it's a cinch), "what's it in aid of?" (what's the purpose behind it?), "to shoot down in flames" (to leave one's opponent scoreless, to skunk), "to make a bloomer" (to pull a boner). The Canadians have their "rebel picnic" (our Glorious Fourth), "unbleached American" (colored person), "improved Britisher" (an Englishman who has resided for some time in the Dominion) and "to have the sun in one's eyes" (to be under the influence of liquor). The New Zealanders have their "to be pie on" (to be a shark at), the Australians "to fancy Fannie" (to play the piano, to tickle those ivories), "to sky the wipe" (throw in the towel), "blackfellow's gift" (Indian giver) and "possum up a gum tree" (blithe and happy).

There has been just as free-and-easy an interborrowing of slang as of legitimate words among the various sections of the Anglo-Saxon world. Gone are the days when a British audience needed a printed glossary to understand an American underworld play. "Tough guy," "lay off," "cop," "oh, yeah," "bump off" are among the terms which an

English police-official deplores as having gotten into the vocabulary of British youth. The Australians have borrowed from us, without change of form or meaning, "scram," "boloney," "okay," "pushover," "says you," "corny," "scanties," "and how." We, on the other hand, have taken from the British Empire terms like "fed up," "swank" and "flapper," along with more recent accretions to slang vocabulary, like "spiv," "spove," "drone," "eel," "butterfly," "wide boy" (all taken from British black-market terminology), and such verbs as "to cheek" and "to chivvy," long in use, but recently given official standing by Labor politicians.

It is difficult, however, for non-English speakers to realize that all English slang is not of American origin, and that all American speech is not slang. An Italian newspaper advertisement for a book describing the American language has a map of the United States covered with such locutions as "skip it!," "in the bag," "lousy," "scram!," "hi, toots!," "hi ya, kid!," "jeepers!," "it's a gag!," then goes on to say: "What kind of a language is this? It is American, a language which is not at all English!"

Foreign languages, of course, have their slang terms, many extremely expressive. In English, "chicken" is slangily used of a young girl; the corresponding word in Spanish (*pollo*) means a dashing young man, while in Italian it means a "sucker." French slang terminology includes expressions like "camel" (*chameau*) or "calf" (*veau*) for "dumb-bell"; "dirty box" (*sale boîte*) for "awful dump"; "ball of suet" (*boule de suif*) for "greaseball"; "old nail" or "bathtub" for "jalopy"; "St. Collect's day" for "pay-day"; "foot-wash" for bad coffee; "to have the cockroach" for "to have the blues." "Beat it" or "scram," which with us in the 20's used to be "23, skiddoo" is "22" in French. The bill presented at the end of the meal is called "the sorrowful one" (*la douloureuse*). *Gratin* is the French equivalent of "upper crust." *Iroquois* means a man of queer habits. *Rigolo,* the French slang word for "funny," comes from the German name of a popular dance, extended to cover amusement in general (*rigoler*). Our own *gigolo* comes from the French, which has also a feminine form, *gigolette;* both words come from *gigoter,* "to move the shanks," which goes back to German *Geige* ("violin"), the instrument used at popular dances. *Bof* (from the initials of *beurre, oeufs, fromage,* "but-

ter," "eggs," "cheese") is Parisian slang for "black market operator" or "blacketeer."

Spanish has an expression for "to kid someone" which literally means "to scalp" (*tomar el pelo a uno*), along with a "calamity" (*una calamidad*) for a bore or pest. Portuguese gives us "big fish" (*peixão*) or "sardine for my cat" for a shapely girl, "bargain" for "sweetheart," and "how is the obligation?" for "how is your family?" Italian calls a sports fan *tifoso* (literally, "one suffering from typhus"), and uses *silurare* ("to torpedo") for "to fire from an important post."

The dividing line between slang, cant and jargon is often difficult to draw. True slang is said to be what is nation-wide, or at least generally understood, cant what belongs properly to the underworld and is not understood beyond that comparatively narrow circle, jargon what pertains to a profession or occupation and is not recognized on the outside. A magazine writer trying to establish the distinction and picking his examples from the stage recently gave "ham" as an example of true slang and "grip" (for "stagehand") as one of jargon. As for cant, however, it is known that gangster terms, particularly under present circumstances of movies, radio and comics, have a way of seeping upward and outward into the general slang and even the vernacular. "Jerk" (origin unknown) is an example of this; so are "mugged" in its double sense of "attacked from behind with a strangle-hold" and "photographed by the police"; "mooch" ("to beg" as a verb, "prospect" or "sucker" as a noun); "ice" ("diamonds"); "saw," "double saw," "C" and "grand," for $10, $20, $100 and $1,000, respectively.

Criminal terms not so well known on the outside are "mit" (bookmaker), "schmier" or "schmear" (variously interpreted as "protection money" or "case of little consequence"), "banker" (payoff man of a numbers racket pool), "persuader" (blackjack or other weapon), "pie wagon" (police patrol wagon), "to sap" (to hit with a blackjack), "skylarker" (suspicious character), "snow-bird" (drug addict), "tin" or "potsy" (any badge of office), "to two-finger" (to pick pockets), "whiz" (pickpocket job), "scratch" (loose bills), "sneeze" (arrest), "snatch" (payroll), "kite" (letter to be delivered outside the jail), "breeze" (jail-break), "yellow papers" (police record), "quizzer" or "quizmaster" (District Attorney). "Snow" for cocaine, "black stuff" for opium, "weed tea" for marihuana are much used by dope peddlers.

An ancient secret-language device still used by criminals is the combination of meaning and rhyme, as when "moan and wail" are used for "jail," "bees and honey" for "money," "bubble and squeak" for "speak," "gay and frisky" for "whisky," "kick and prance" for "dance." Villon used this device in some of his poems.

In common with ordinary slang, underworld cant has the characteristic of coining or adapting numerous words for the same meaning. A wallet, for instance, is "poke," "oakus," or "leather," while a gun goes by any of these names: "betsy," "roscoe," "iron," "gat," "shooter," "cannister," "hardware," "boomstick," "equalizer," "noise."

The case for jargon is more difficult to present. In a sense, all professional terminology, including that of medicine, the law, education, engineering, even business and theology, is jargon, since it offers terms not familiar to the general population. When your physician tells you you are suffering from "bilateral perorbital hematoma" (meaning you have a black eye), or your lawyer speaks of property held in "escrow," when your banker talks of a rise in the "rediscount rate," or your garage-man of a missing "gasket," the chances are you won't understand, though all these terms are listed in a comprehensive dictionary. Educators thrive on a diet of "integration," "correlation" and "motivation," while some linguists love mouth-filling terms like "morphophonemic," "sandhi" and "compound juncture." Each occupation and walk of life has its special terminology, a good deal of which has all the earmarks of slang, save for the one feature of being generally understood, a feature which is very often added in due course of time. Terms that were once exclusively nautical, like "even keel," "to know the ropes," "to give plenty of leeway," "to keep a weather eye open" have gotten into everybody's language, though with shifts of meaning from the seafaring originals. So have sporting terms like "to play ball with," "to be caught flat-footed," "to warm up to," "hit and run." So have labor terms like "lackey," "rat," "check off," "scab" or "fink" (said to come from the Danish word for "finch"), "wildcat strike," "featherbedding" and "graveyard shift."

Some jargon terms are ordinary and matter-of-fact, like the "blooms" and "skelp" used by the steel industry to denote rectangular bars and strips to be bent, or the "breeze" used by coal dealers for small coke, or the "rogues" used by seed-growers for plants that revert to earlier

types and fail to produce the blossoms expected. Others display imagination, verve and even poetry, like the musicians' "godbox" for organ, "licorice stick" for clarinet, "frisking whiskers" for warming up. Soda clerks have devised such expressions as "stretch one and paint it red" for a large coke with a cherry, "shake a hula" for a pineapple milk shake, and "ap one" for a piece of apple pie. Truck drivers have their "pin her ears back" for "to glide to a stop," while at the other end of the line we have the term "nose" applied by the perfume industry to what the French call a *parfumeur-créateur,* the man whose business it is to devise new blends. The radio has created "hooperating," television has contributed "videogenic."

Three occupational fields that have devised complete vocabularies of jargon are the rodeo people, the oilmen and the railroad workers. In rodeo (or "waddy") lingo, "appalucy" is a piebald horse with white-rimmed eyes; "bosal" is a bridle; "bulldogging" is the throwing of a steer by grabbing its horn and nose; "to california" is to throw an animal by tripping; "crowbait" is an unprepossessing-looking horse; "doughbelly" is a domesticated calf; "broomtail" or "fuzztail" is a wild horse; "to grab the apple" is to hold on to the saddle-horn; "gunsel" is a would-be cowboy; "jughead" is an obstinate horse; "quirley" is a hand-rolled cigarette; "to see daylight" is to rise in the saddle.

In the argot of the Canadian oil fields, "catskinners" are men who drive tractors; "cherrypickers" are small cranes; "hoopies" are ten-ton trucks; "mudhog" is a well-drilling pump; "Christmas tree" is the well-head; "roughnecks" are driller's helpers.

Railroad men refer to a locomotive as a "pig," a refrigerator car as a "reefer," a switch as an "iron," the conductor as "brains," a go-ahead signal as a "highball," a railroad yard as a "garden." They display the customary characteristic of slang by calling a caboose by any of these names: "doghouse," "zoo," "brain cage," "perambulator," "glory wagon," "monkey wagon," while an engineer is variously known as "Casey Jones," "highball artist," or "eagle-eye."

The military profession revels in jargon-creations, but the product is, in the nature of things, more transitory than in permanent callings. During the late war, for example, the G.I.'s in Italy coined "segnorina," a cross between Italian *signorina* and Spanish *señorita,* to designate a woman of low character, to which the Italians retaliated with *okeyna*

(from "O.K.") to indicate a girl who fraternized excessively. Among other G.I. creations (some merely copied from earlier British Army slang) were "Dutch quarter" for a hug, "Yankee dime" for a kiss, "gook" for a native, "wog" for an Egyptian, "jig" for a native of Trinidad. Navy men created "sky juice" for water, "collision mats" for pancakes, "fuel oil" for syrup, "gravel" for sugar, "horizontal duty" for sleep and "squack" for girl. American war prisoners in Germany appropriated "goon" for German soldiers and worked out "ferret" for spy and "glop" for food.

Military jargon also suffers from an excess of profanity and obscenity. A lady professor who had undertaken a study of G.I. slang in World War Two finally had to concede that she was handicapped by her sex and sense of decency. "The expressions, the names for food, etc., are so unprintable that my students assure me I can't be told them" was her complaint.

The jargon of the younger generations might be described as the slang of the future. Oldsters are often bewildered at hearing from the mouths of their sons and daughters such terms as "his garden is green" or "cut the celery," and they shake their heads because they don't recall their own youthful equivalents, "he's in the dough" and "shoot the works." In bobby-sox parlance, "trolleyriding" means going steady; a "bubble" is a conceited drip; a "moroff" is a "goony" moron; a "pouter pigeon" is a sulky bobby-soxer, while the abbreviation "O.A.O." means the "one and only." Baby-sitting, a comparatively modern phenomenon, has been replaced by a new and more expressive term, "bratting," and at Princeton baby-sitters are known as T.T.T.'s (tiger tot tenders). If this terminology is replaced by a new set of words by the time this work appears in print, do not blame the writer; blame the rapid rate of change of language, and particularly of slanguage.

Additional volumes could be and have been written on the allied subjects of slang, cant and jargon. Enough has been said here, however, to present these linguistic topics in proper perspective. Slang, cant and jargon differ in degree, but not in kind, from the normal language-processes of word-coinage, borrowing and semantic change. Slang, cant and jargon *are* language, illegitimate from the standpoint of the purist (who in the end invariably has to draw in his horns), fully

legitimate from the standpoint of the linguist, who believes in linguistic realities rather than linguistic ideals.

What is scoffed at and despised today may be exalted and respected at a later date; or it may shrivel away and disappear. The fate of words and expressions parallels that of human beings. Some rise, others fall; some prosper, others die. It does not behoove us to despise a man by reason of his present lowly estate, because only God knows what potentialities that man may store within himself. Neither is it fitting to scorn words which today are heard only in the slums or within the restricted confines of a trade. Tomorrow those same words may sweep the nation and find their way into the everyday vocabulary of a twenty-first century Shakespeare.

THE ESTHETICS OF LANGUAGE

Prince, give praise to our French ladies
For the sweet sound their speaking carries;
'Twixt Rome and Cadiz many a maid is,
But no good girl's lip out of Paris.
—François Villon, "Ballad of the Women
of Paris" (Swinburne translation)

This chapter deals not with the literary or stylistic beauty of the written language, a topic that properly pertains to literary history and criticism, but rather with a subject generally avoided in language books, mainly because it is reckoned too subjective for scientific investigation. Yet it is a subject that arouses the layman's interest, as witnessed by the frequent repetition of the questions: "Is language (in general) beautiful or ugly?"; "Which is the world's most beautiful language?"; "What is the most beautiful (or the ugliest) word in the English language?" Those who ask these questions are seldom aware of their implications. What they are asking for is a treatise on the beauty of languages *divorced from their literary output,* and of words *separated from their semantic associations.*

Since the dawn of history, writers, poets and philosophers have dealt with the topic of the "beauty" of language. The Greeks and Romans held their own languages to be beautiful, but their contempt for other, "barbarous" tongues is evidenced not only by occasional slurring allusions, but also by the fact that no attempt was made to save them for the benefit of posterity. The Greeks were in touch, throughout their entire history, with numerous tongues of Asia Minor and the eastern Mediterranean basin, of which they might have left us some inkling beyond the rare glosses of their lexicographers. The Romans permitted Etruscan, the tongue of a civilization that had

greatly contributed to their own, to go unrecorded, so that today we vainly seek a key to it. It was a matter perhaps of national pride, perhaps of indifference, that the Greeks cared only for Greek and the Romans for Latin and Greek. Allusions to the beauty of the Greek language occur rather frequently in Roman writers, and in the days of the Empire Greek was probably as widespread among cultured Romans as was French in eighteenth- and nineteenth-century Europe.

The early Middle Ages, with their other-worldly preoccupations, cared little for the esthetics of language, which was viewed primarily as a tool for conversion and proselytism. We get an occasional hint that the tongues of the Germanic invaders were considered unlovely, as when an Italian monk ridicules his Ostrogothic colleagues who call loudly for food and drink in their own barbarous jargon, but even here it is difficult to determine whether the antipathy is really directed at the uncouthness of the language or that of its speakers.

It is only with the dawn of the Renaissance that the cult of beauty returns, and with it comes a new reverence for the loveliness of the Classical tongues, together with a series of apologies on the part of authors using the "unlovely" vernaculars, which had already been in spoken use for some centuries, with no appreciable comment.

In the days of Humanism a veritable search for linguistic beauty was undertaken. Greek and Latin words were judged not on the basis of their authenticity, but of their supposed esthetic qualities, until the great French philologist Henri Estienne in 1572 finally reminded his fellow-scholars that truth is superior even to beauty, and that Classical words were not to be accepted or rejected on the ground of their resounding qualities or use by reputable ancient authors, but on the basis of their objective existence in the ancient languages.

From that point there began a struggle between the defenders of historical truth and the champions of esthetics which still goes on today. The word "Gothic," applied to anything which smacked of the non-Classical Middle Ages, was attached to language as well, and even now Italian refers to an outlandish word as "Ostrogothic."

Nationalism, too, entered the picture, and speakers of languages which had by this time acquired a full-fledged literary tradition undertook to discuss at length the "beauty" of their respective languages. This "beauty" was sometimes confused with expressiveness, effective-

ness, clarity, precision, concision, richness of vocabulary, wealth of literary accomplishment; at other times it was predicated on a more truly linguistic basis, as when the morphological structure or, even more appropriately, the sounds of various languages were compared.

While a full-sized conflict rages today concerning the esthetic merits of the various tongues, internecine warfare is conducted in many corners of the battlefield among the advocates of the relative merits of different dialects of the same tongue, or of correct (*i.e.,* literary) speech and incorrect forms (*i.e.,* slang or colloquial varieties).

The pure linguist normally refuses to take part in such controversies, partly because they lead nowhere, a good many of the assertions made by the contestants being, by their very nature, unprovable; partly because he deems it his task to establish the scientific facts of language, not esthetic theories; partly because the issues involved in such discussions are usually hopelessly mixed, representing a hodgepodge of nationalistic pride, literary evaluation, subjective estimates and emotional reactions, all of which lie quite outside the domain of science.

There is only one compartment of language concerning which it may be said that there is some justification for an objective esthetic discussion (provided it is granted that there is no inherent antithesis between the two terms "objective" and "esthetic"). This is the field of sounds. Even here, however, we have the injection of factors that are both extraneous and subjective.

Recently a poll was conducted among American and British writers to ascertain which words in the English language were considered the "most beautiful," which the "ugliest." The results of the poll were in part as follows: most beautiful to the Americans are "dawn," "lullaby," "murmuring," "tranquil," "luminous," "golden," "melody"; to the British "carnation," "azure," "moon," "heart," "silence,". "shadow," "April." This discrepancy between the two English-speaking countries is *prima facie* evidence of the subjective nature of the choice.

Among the ugliest words selected were "gangrene," "scram," "guzzle," "mange," "swell," "gripe," "spinach," "jazz" and (fittingly) "cacophony." A glance at these partial lists suffices to indicate that the voters were primarily motivated not by the beauty of sound or the esthetic qualities of the words, but by their meaning. Each word was

labelled beautiful or ugly in accordance with the associations it contained, not with its melodious features.

The only way of conducting such a poll more or less objectively would have involved using judges who had no idea whatsoever of the meaning of the words, and who would have let themselves be guided in their choices only by the impression made by the sounds upon their ears. Even ordinary cultured foreigners knowing no English would have been unsatisfactory judges, because many of the words have cognates in the principal western tongues and their meaning would have been subject to recognition.

This situation regularly arises in all judgments concerning the beauty of individual words or expressions within a given language when the referees are at all acquainted with the language. It is almost impossible to separate esthetic judgment from semantic associations. Under the circumstances, we are judging not esthetically, but semantically, or worse yet, in accordance with prejudice, like the teacher who said that the two most hateful words in the English language were "lousy," and "swell," which were forever cluttering up her pupils' utterances and preventing them from speaking good English. On this point, a newspaper editorial decided that "swell" was a "lousy" word, but "lousy" was "swell."

More objective judgments can perhaps be rendered in the case of foreign tongues, though here again the factors of prejudice, like or dislike for the speakers or their countries, past history, present form of government, or what have you, are bound to enter the picture. Familiarity, too, is a factor. A language may sound quite outlandish and uncouth until we begin to learn to speak it, and may then unfold previously hidden charms. The tendency on the part of people to lump together all the languages they do not know into a single "foreign" category is well known; Chinese and Japanese are said to sound alike by people who know neither, although no two languages could have a more widely dissimilar sound-pattern. Another phase of familiarity that influences our esthetic judgment lies in the fact that speakers of languages like English, which is filled with short, snappy terms, will naturally show partiality toward languages of a similar nature, while speakers of tongues replete with long, rippling, mouth-filling words

will like, or at least not mind, similar characteristics in another language.

On the purely objective side, there are a few factors that may be said to contribute to a language's acoustic beauty, and these are for the most part identical with those elements that make for musicality. Languages in which there is an overabundance of involved consonant-clusters, or of consonant-sounds to the detriment of vowel-sounds, are seldom pronounced beautiful. This is because vowels carry musical pitch far better than consonants. The musical ear normally recoils from extreme sounds, whether these be of the guttural, palatal, sibilant or nasal variety. Sounds which are easy for the vocal apparatus to produce, whether or not they appear as phonemes in the language we speak, convey an impression of beauty, though this is to some degree a matter of familiarity. Vowels normally require less juggling with the speech-organs than consonants; hence languages rich in vowel-sounds are more likely to convey an impression of beauty. There is little to recommend to the esthete in combinations like *sks* in English "asks" or *chtsch* in German *Knechtschaft*.

Purity of vowel-sounds constitutes another esthetic factor. The "cardinal" vowel-sounds of *a* in "father," *e* in "met," *i* in "machine," *o* in "or," *u* in "rude" may be esthetically more attractive than the *a* of "lame," the *o* of "home," the *u* of "pure," which are diphthongs, or the *u* of "cut," the *i* of "pin," the *a* of "hat," the *o* of "not," which are close-clipped and cannot normally be sustained, or such rounded middle-vowel sounds as French *u* and *eu*. Here we tread on dangerous ground, since it may be argued that preferences among vowel sounds are based largely on the factor of familiarity. At the same time, it is a scientifically established fact that it is impossible to sustain a word like "kiss" on high F for more than five seconds, or to sing a word like "stop" on three beats of slow time plus a retard.

The regular alternation of consonants and vowels has something to do with the esthetic impression. Languages in which a majority of the syllables end in vowels, like Italian, Spanish or Japanese, normally produce a more pleasing impression on the ear than do those where syllables end for the most part in consonants or consonant-clusters.

Languages may also be classified as "clear-cut" or "sloppy," according to their treatment of vowels in unstressed syllables. The clear-cut

language gives all its vowels, whether stressed or unstressed, a definite, easily perceptible value. Such tongues as Finnish, Czech and Italian can be taken down from dictation even if one does not know them thoroughly. This is not at all true of tongues like English, Russian or Portuguese, where the unstressed vowels lose their clearness and tend to merge into an indefinite sound. The issue here is of course complicated by the fact that the spelling of these languages has not kept pace with the pronunciation, which was at one time far more clear-cut than it is today.

Intonation, pitch, relative speed of utterance all play a part in the esthetic picture, but here much depends on the individual speaker. It is a commonplace that Italian can sound majestically beautiful when handled by a cultured Central Italian speaker using the appropriate modulations, and ridiculously uncouth when uttered in a shrill, high voice, with a maximum of pitch-range, by a Neapolitan *scugnizzo*. The same applies, in somewhat lesser degree, to some of the local intonations of the United States. German can sound lovely in the mouth of an opera-singer, unlovely in that of a Bavarian or Swiss peasant.

All of the above classifications, even when based on objective factors, such as the presence or absence of consonant-clusters and the relative frequency of vowel-sounds, leave the problem of linguistic esthetics largely unsolved. Beauty and its appreciation are things too thoroughly and individualistically subjective for any true scientific evaluation. The sense of beauty is subject to too many factors of habit, education, psychological association and, in final analysis, the choice of the individual. The application of an esthetic criterion to language, which has objective reality and a practical function, is bound to be not merely unscientific, but unsatisfactory. At the most, it can only lead to chauvinistic pronouncements, of which an early one, made in the eighteenth century by the Russian poet-physicist Lomonosov, is given as an example, that the reader may *ab uno discere omnes:*

"Lord of many languages, the Russian tongue is far superior to all those of Europe, not only by the extent of the countries where it is dominant, but also by its own comprehensiveness and richness. Charles the Fifth, Emperor of the Holy Roman Empire, said that one ought to speak Spanish to the Deity, French to one's friends, German to one's

enemies, and Italian to the fair sex. But had he been acquainted with Russian, he would assuredly have added that one could speak it with each and all; he would have discovered in it the majesty of Spanish, the vivacity of French, the strength of German, the sweetness of Italian, and, in addition, energetic conciseness in its imagery, together with the richness of Greek and Latin."

An Italian proverb says: "Every bird finds its own nest beautiful." Its closest English counterpart is "Be it ever so humble, there's no place like home." It is well to keep these in mind when we are tempted to make esthetic pronouncements on languages. The speakers of a tongue normally find that tongue beautiful, first because they are thoroughly familiar with its sounds, secondly because it is to them fraught with all sorts and varieties of sentimental associations. The Czech loves his ř-sound, the Welshman his *ll,* the Hottentot his clicks and grunts, which people with a different language background have extreme difficulty in acquiring. To say that a language is better suited than another for singing, oratorical, literary or philosophical purposes is legitimate, though with circumspect qualifications. To extol a tongue as inherently beautiful, or condemn another as inherently ugly, is unworthy of the enlightened spirit of tolerance that should prevail among civilized men. The function of language is not to be beautiful but to be meaningful; and all languages are equally meaningful to their own speakers.

THE SOCIAL FUNCTION OF
LANGUAGE

The Indispensability of Language

Language is a city to the building of which every human being brought a stone.—Emerson

Language most shows a man; speak, that I may see thee!—Ben Jonson

The story of language is the story of human civilization. Nowhere is civilization so perfectly mirrored as in speech. If our knowledge of speech, or the speech itself, is not yet perfected, neither is civilization.

Language is forever changing and evolving, as are all human things. Linguistics, the study of the laws governing the evolution of language, becomes socially significant only when it sheds light upon the people who speak languages and their civilization. When this light is properly cast, linguistics ceases to be the dry-as-dust subject that many people have suspected it of being, and becomes the most absorbing of pursuits—absorbing as the study of mankind itself.

The study of language and languages has been described as fundamentally democratic, in contrast with the study of literature, which is essentially aristocratic. Literature reflects human activity as carried on by the best minds, the intellectual *élite* of the human community. This description is not at all invalidated by pointing to anonymous, or so-called "popular" literature. The mere fact that we do not know the name of the author of a literary work does not mean that such an author did not exist, that he was not an individual, and that he did not elaborate, by his own intellectual power, his own masterpiece. "Popular" literature, in the sense that the entire population of a given

community collaborated in its production, is a figment of the imagination. At the most, it may be said that an author gathered and expressed the inarticulate thoughts of those around him. But he gave those thoughts his own indelible imprint, and a literary author goes almost as often against the current of his environment as with it.

Language, on the other hand, is something to which everybody contributes, by the mere fact that he speaks it. Parents transmit their language-peculiarities to their children, teachers to their students, leaders to their followers, members of a social group to one another. Everybody lays his stone in building up the monument that is language. The contribution of the individual, anonymous member of the masses is occasionally a conscious one, far more often unconscious. The most fertile field for the cooperation of the entire community is language, which everyone, with practically no exception, possesses and uses. Therefore the study of language is a social science to the highest degree. Language is the tool and product of all of human society.

Language is something more. In spoken or written form, it is the indispensable vehicle of all human knowledge. It is the basic foundation of all human cooperation, without which no civilization is possible. Let us examine these two propositions in detail.

All human records whereby the accumulated experience of the race is transmitted from one individual, one generation, one era, one racial group to another appear in some linguistic form, spoken or written, carved on wood or metal or stone. Even those records which are non-linguistic in the ordinary sense of the word, artistic, architectural, musical or even gestural, must be translated into terms of language to be fully understood. In a broader sense, they too form part of language.

But what is even more important, they could never have come into being had language not been there to permit that intelligent, full-fledged cooperation between two or more human beings which is the very well-spring of all human progress and which differentiates the activities of man from those of the animal world.

If people had not been able to communicate with one another, they could not have produced the pyramids of Egypt, the Gothic cathedrals, the cities of the ancient and the modern world. In fact, they could not have produced anything beyond the flint hatchet and the bow and arrow.

If the curse of Babel were to fall upon mankind today, and the mutual understanding that language affords us were to vanish utterly, our great monuments of modern civilization would soon become like the Biblical tower itself, and endure in ruins only as a symbol of frustration and defeat.

All our present-day activities are carried on, as they have been carried on for untold centuries, by the grace of and with the help of language, spoken, written, gestural or symbolic. Only those of us who have found ourselves isolated in the midst of a foreign-speaking community where the spoken and written language was incomprehensible, and even the gestures and symbolic signs differed from our own, can realize the complete bafflement and helplessness that is engendered by the lack of a common denominator of understanding.

Not only is there no walk of civilized life from which language is absent, but all forms of human activity hinge on the use of language taken in its broader sense, as the community of understanding between the producer and the receiver of meaning. "Signifier" and "signified" are terms used in linguistics to denote the cluster of sounds that carries a meaningful message and the burden of the message itself. One is occasionally tempted to shift those definitions to betoken the person, contemporary or dead for thousands of years, who utters a significant statement or carved it on ancient stone, and the person who, through his sensory organs, perceives that statement and accurately translates it into terms of his own consciousness.

Although language is the transmitter of thought, it is not enough to grant it a niche among the humanities and leave it there to serve as a tool of literature and philosophy. Although it has numerous physical manifestations, it is not enough to relegate it among the physical sciences and describe it as a branch of physics, physiology or anthropology. Although it is one of the most refined products of the mind, it is not enough to view it as a mere psychological activity. Language is the sum of all these things, and something more. It is the conveyor, interpreter and shaper of man's social doings. It is all-pervasive. It enters into, influences, and is in turn influenced by every form of human activity without exception. Its functions are as numerous as the fields in which human ingenuity operates.

That everything we do and think creates, changes, destroys, or

otherwise influences language is self-evident. What is not so obvious, perhaps, is that language in return affects all our actions and thoughts. It has been fully established that a change in language on the part of an individual is attended by corresponding changes in gestures, facial expression, carriage, even humor and taboos. This is readily observable in the case of bilingual speakers when they pass from one language to the other. But this is only one phase, and not the most important, of language's influence upon other activities, paralleling the influences of those activities upon language. To give the full proof of this double relationship would require as many chapters as there are separate fields of endeavor. In the chapters that follow, a mere sampling is offered, but that sampling is fully characteristic of language's role in human affairs. Ancient or novel, material or spiritual, crass or lofty, every form of man's activity calls for a transfer of thoughts, ideas and meaning, thereby utilizing language; gives rise to a complete terminology, thereby creating language; and is insensibly but powerfully channelled and modified by the pre-existing thought-and-language pattern, thereby submitting to language.

Food and drink, shelter and attire are differentiated and distinguished by descriptive language. Yours is the choice between kousskouss and smörgåsbord, between kvass and rumgullion, between an atrium and a patio, between a sarong and a toga, but first those objects must be brought to your notice in meaningful terms and translated into terms of your own consciousness. Father and mother and sister and brother and all the complex in-law relationships to which human civilization has given rise become productive of something above and beyond mere animal instincts only when the terms themselves acquire significance, and often the very nature of the relationship is partly based on the conceptual meaning, as when Russian carefully distinguishes between a sister's husband and a wife's brother, or Latin merges nephew and grandson into an identical word.

If the language of the Eskimos has no word for war, it may indicate the absence of that time-worn human institution from that branch of the human family. If Russian relinquishes its word for army and later reintroduces it, the fact may betray a resurgent spirit of militarism.

Abstract political concepts such as parties of the right and of the left reveal trends of thought that hark back to Biblical times and be-

yond. The division of parties into right and left originated in early
European legislative bodies, where the presiding officer, being gener-
ally a conservative, would honor his fellow-conservatives by seating
them at his right, and put the liberals at his left; in so doing, he fol-
lowed the Biblical precedent, where the good are on the right and the
bad on the left of God. But the Biblical precedent itself seems to have
deeper roots; in most individuals, the right hand is favored by nature,
the left disinherited; translated into political terms, this means that the
parties representing the privileged classes are naturally the "right-
handed," those representing the underprivileged the "left-handed."

The language of the law supplies us with an almost complete his-
tory of our legal institutions, but at the same time penetrates the spoken
tongue of the masses to a degree generally unsuspected. To cite an
example: the Latin word for "with," *cum,* survives in Italian and
Spanish *con,* but on French soil it was replaced by *apud,* another Latin
preposition that had the meaning of "in the presence or company of";
ultimately, this *apud,* combined with *hoc* ("this"), gives rise to the modern
French *avec.* The reason for the replacement of *cum* by *apud* was a
purely legal one. It was a legal custom among the Franks, if one were
accused of a crime, to appear in court *apud* (not merely "with," but, in
the precise terminology for which the language of the law has always
been noted, "in the presence or company of") a certain number of men
of good standing who testified as character witnesses. So great was the
force of this legal custom that "in the presence of" ultimately sup-
planted the ancient "with."

Trade gives rise to complete languages, not only of the pidgin
species, but of so distinguished and literary a variety as Italian, which
far from being the pure Tuscan that some have claimed, seems to have
been in origin a compromise of various local dialects devised by the
seafaring men of Pisa and Genoa and Amalfi for purposes of com-
mercial understanding. Money, postage, weights, measures, directions,
the calendar, hinge on language and its meaning, as well as on an
ancient symbolism which is probably language's older brother.

Art and architecture, music and the dance would lose much of their
conceptual force were language not there to sustain it. It is not alto-
gether a coincidence that the speakers of Italian, a tongue of a certain
sound-pattern, have given the world its best operatic music, while the

speakers of English, endowed with a sound-pattern of a radically different type, seem almost incapable of producing a satisfactory opera. The concepts of nationalism embodied in national anthems are carried far more on the wings of words than on the wings of music, as evidenced by the fact that some of their tunes were once drinking-songs, love-ditties or religious hymns.

Stage, screen, radio and the press do much to spread language of a certain type, to standardize and normalize the system of utterance and form of expression within a given community. A language's standard pronunciation is most often described as that of the national stage, or that of radio announcers, while the press sets the pace for the national written language. At the same time, stage, screen, radio and press are powerfully acted upon and even transformed in their approach by language itself, as witnessed by the lengths to which they go to gain national and international acceptance based on linguistic comprehension. The sound-track is said to be "fostering a new universal English, equally comprehensible in America, Britain and the Dominions." Actors receive training in this new universal English, as well as in foreign tongues for export films. The amount of foreign-language broadcasting done by our own and foreign radio stations for purposes of political and cultural propaganda is enormous, while the foreign-language editions of publications like the *Reader's Digest* have done much to give our own journalistic standards an international slant.

Sports and games penetrate the language to the same extent that they are penetrated by it. The English tongue is replete with sporting terminology which has overrun its banks ("hit-and-run drivers," "to pinch hit for someone," "to hit below the belt," "to jump the gun," "to be on the inside track," "to be in the chips," "to be behind the eight-ball," "it isn't cricket," "according to Hoyle"). "Trump" and "tenace," "pawn" and "checkmate" have international figurative currency. Baseball and its terminology have probably done more to bring the meaning of the American way of life home to the Europeans, Latin Americans and Japanese than any form of direct cultural propaganda. *Beisbol* and *jomrón* ("home run") are as familiar to the Mexicans as their native *corrida* and *matador*, and Latin-American crowds have learned to cry *"¡Maten al arbitro!"* with the same gusto with which Ebbets Field fans shout, "Kill the umpire!"

Racial intolerance is probably based on the linguistic more than on any other factor. It is no accident that the Greeks coined the term "barbarian" in imitation of the supposed babbling of those whose languages they did not understand, that in many languages the term for "foreigner" coincides with the word that means "dumb" or "silent," and that shameful diseases are frequently given as a qualifying adjective the name of another national group, as when the Renaissance Italians gave syphilis the name of *morbus gallicus,* or "French disease."

As indicative of the trend of a civilization as the language itself are the taboos, that body of words which may not be uttered (like "ivy" to the Roman high priests, or "bloody" to the English), or the list of people who may not be directly addressed, like a mother-in-law to the Navajo Indians. Such taboos lead to circumlocutions, which in turn lead to revolutionary replacements in the vocabulary of the language where they occur.

Names, both personal and of places, are generally history-revealing. Sayings and proverbs give a clear clue to the speakers' mentality and habits. Formulas of politeness and insult often afford a clearer insight into a national psychology than do volumes of historical works.

Ancient civilization had one great form of spiritual activity, religion. Modern civilization has added two more, education and science. In the case of all three the influence of language and upon language is paramount.

The oldest written records of practically every ancient language are religious in nature. With meanings transferred to a thousand other fields, terminology originally religious in nature permeates the vocabulary of every civilized tongue. On the other hand language, more than any other factor, serves as the symbol of religion. Hebrew is the vehicle of Judaism, Latin of Roman Catholicism, King James English of most versions of Protestantism, Greek and Church Slavic of the Eastern Christian Churches, Arabic of Mohammedanism, Sanskrit of Buddhism. Several languages are basically the same and differ only because in one variant they are spoken or written by speakers of one religious faith, in another version by followers of a different creed. Only a change of wording differentiates certain prayers so that they are recognized as pertaining to one or another branch of a given faith. Under

these circumstances, the linguistic form becomes the shibboleth, the distinguishing symbol of religion.

The gigantic and ever-growing vocabulary of science and technology is largely international, as are most scientific and mathematical symbols. If a unified world tongue is ever achieved, it is likely that it will be due to the efforts of scientists and technicians who are irked by time-wasting and confusing language-differences. While awaiting that blessed event, science and technology contribute to the fast-expanding vocabularies of all living civilized tongues at a faster rate than all other fields of human endeavor put together.

Education likewise contributes to vocabulary growth, and is influenced by it. But education's greatest and noblest contribution to the cause of mutual understanding resides in its attempt to make language, in all its forms and varieties, accessible to all people. The process of education is carried on almost exclusively by means of the spoken and written word. No field of knowledge, with the possible but very doubtful exception of the pictorial and plastic arts, can be efficiently imparted save through the medium of language. In most fields of learning, the language auxiliary is paramount and indispensable.

It is fashionable in certain circles to scoff at language study and to advocate other pursuits, taking language for granted. A moment's reflection will reveal the absurdity of this attitude. In what other pursuits will language and languages not enter as necessary tools of expression and understanding? And if you will scoff at language and languages, how, save in terms of language, will you scoff?

LANGUAGE AND RELIGION

*In the beginning was the Word; and the Word was with God;
and the Word was God.*—John, 1:1

They shall speak with new tongues.—Mark, 16:17

If we were to single out the one sociological factor that has had the deepest influence on the history of language and has in turn been most deeply influenced by language, religion would probably be that factor.

The majority of languages have as their earliest written document a religious text. It might almost be suspected that writing was developed not as an auxiliary to speech, but as an aid to religion and a depository of religious tradition.

The Akkadian cuneiform and the Egyptian hieroglyphic inscriptions are overwhelmingly concerned with sacred things (the very word "hieroglyph" means "sacred carving"). The earliest Chinese writings, from about 1500 B.C., deal with the soothsayer's art. The Rigvedas and Brahmanas of India are religious hymns and rituals. Hittite records are mostly ritualistic. Avestan, the sacred ancient tongue of Persia, is devoted almost exclusively to the tenets and rituals of Zoroastrianism. The Iguvine Tablets, our most important document of the ancient Umbrian tongue which once vied with Etruscan for the linguistic domination of central Italy, are a detailed description of ritual procedure, while our records of Etruscan itself, insofar as we can decipher them, seem to be predominantly of the same nature.

Nearly all the great religions of the world have either given rise to a language or have carried the obscure dialect that first served them to distant areas and world-wide fame. The Jewish faith has spread Aramaic and Hebrew, not to mention Yiddish and Sephardi, far beyond the borders of Palestine. Mohammedanism carried not only the

Koran, but also the once-isolated language of southern Arabia to vast regions of Europe, Asia, Africa and Oceania, where it influenced, more or less deeply, the native tongues; such languages as Persian, Hindustani, Turkish, Malay, Hausa are replete with Arabic words. Buddhism transferred the sacred writings of Gotama's faith to Tibet, Siam, Indochina, China and Japan; today, in the Buddhist temples of Nippon, Sanskrit prayers and the sacred invocation: *"Om mani padme hum!"* ("Hail, Jewel in the Lotus! Amen!") are mumbled by priests who have almost forgotten their meaning.

Christianity found two thoroughly established languages, Latin and Greek, ready to act as its instruments, and it was thanks to Christianity that these two languages survived and spread instead of being submerged by the incoming waves of foreign-speaking barbarians. The conqueror normally imposes his language upon those conquered. Why was the reverse true in the case of the Germanic invaders who overran the Roman Empire? There is only one answer, one so obvious that it is often rejected: as they came into the Empire, the Germanic invaders were converted to Christianity, and the language of western Christendom was Latin. Adoption of the religion carried with it adoption of the language indissolubly bound with that religion.

At a somewhat later period, however, Christianity, having developed a mass-appeal that had to be made in their own tongues to peoples living beyond the borders of the former Roman Empire, broke down the Classical system of aristocracy in language whereby only Greek and Latin were considered worthy of study.

The work of missionaries in reducing spoken languages to written forms, giving them dignity, culture and a literature, began even before the Empire's fall and has continued uninterruptedly since. Many, if not most, of the modern languages of Europe have as their first written document a translation of the Bible made by missionaries. This is true of the first Germanic tongue to boast a literary form, Gothic, which the Bishop Wulfila introduced to the world in the form of a fourth-century translation of the Bible; of Armenian and Georgian, which first appear in similar form in the fifth century; of Slavic, for which the Bishops Cyril and Methodius, missionaries from Constantinople to the Slavs, devised the Cyrillic alphabet in the ninth century; of Albanian, with

its baptismal ritual of 1462; of Finnish, with its 1548 Bible; and of many others.

At the same time, established languages were assisted on the road to standardization and modernization by religious texts. Luther's translation of the Bible in 1531 laid the foundation for the modern German tongue, and the role played by the King James version in fixing the standards of modern literary English is too well-known to bear repetition.

Today, it is thanks largely to the missionaries of the Christian religions that we are acquainted with countless tongues of Africa, Asia, North and South America, Australia, and the Pacific. Long before linguistic scientists and linguistic explorers arose, these missionaries repeated the historical performance of their early predecessors. Arriving on the scene of their religious activities, they at once proceeded to study the native tongues, devise for them written forms, and translate into them the Bible for the use of their converts. Nor is the process limited to the missionaries of the Christian faith. In the eighth century A.D. Buddhist missionaries from India gave the people of Java their first religious-literary document, and in many localities of Asia and Africa the sole written form possessed by the local tongue appears in the Arabic script introduced by Mohammedan missionaries.

There is what may be described as a negative influence, as well as a positive one, that religion exerts on language. A tongue used as the sacred vehicle of a religious faith tends to become petrified and to stifle linguistic development. In medieval Hungary all writing had to be done in the Latin of the Church; it was an offense occasionally punished by death to use the vernacular in written form. This kept Hungarian for a long time as a series of purely oral dialects, and retarded its formation as a national tongue. One of Mustapha Kemal's objections to the Arabic alphabet, which he replaced with Roman characters, was that it had retarded the progress of the Turkish language; his reform entailed not only a change of script but also a purification of the language, which was purged of its Arabic and Persian loan-words, many of them religious in origin.

Language, particularly in its written form, is often made the symbol of religious faith, even to the point of becoming a shibboleth. The Serbo-Croatian of Yugoslavia is to all intents and purposes a single

spoken tongue. But the Catholic Croats use Roman characters, while the Orthodox Serbs use Cyrillic. Railroad stations in Yugoslavia bear the identical names in the two scripts. Hindustani, the leading of India's many tongues, takes two written forms according to whether its speakers are Hindus, in which case they call the language Hindi and use the Devanagari characters of ancient Sanskrit, or Moslems, in which case the tongue is called Urdu and spelled out in flowing Arabic script. In the Rumansch-speaking Engadine section of Switzerland are two villages, one Catholic, the other Protestant. They speak the same dialect, but spell it differently to accentuate their religious individuality. English speakers are, for the most part, acquainted with those minor differences in the wording of the Lord's Prayer or Apostles' Creed which mark the service as Roman Catholic, Episcopalian, or of other Protestant sects ("Who art in Heaven"—"Which art in Heaven"; "trespasses . . . those who trespass against us"—"debts . . . our debtors"; "the living and the dead"—"the quick and the dead"). The use of "For Thine is the kingdom and the power and the glory" at the close of the Lord's Prayer definitely marks the service as Protestant.

Perhaps the most important historical incident in which language and religion played an interrelated part was Charlemagne's encyclical of 786, ordering the bishops and priests of his realm to use a more grammatically correct Latin in the sermons and scriptural readings of the churches. The result was a *coup de grâce* to the already-tottering Vulgar Latin then spoken in France. Deprived of the support of the familiar Church language, now suddenly restored to Classical standards incomprehensible to the masses, the spoken tongue of the entire region was swiftly transformed into Old French. In 813 Charlemagne was forced to recognize the new state of linguistic affairs in his northern French provinces, and reversing his earlier decision, ordered the Church sermons to be delivered in the *lingua romana rustica,* the newly-born French language, instead of the *lingua latina.*

The influence of religion upon vocabulary in all civilized languages is immense. To cite examples from English, we have in the first place words that have largely retained their religious meaning, like "temple," "church" and "chapel," "altar" and "shrine," "minster" and "monastery" (originally the same word), "prayer" and "worship," "anoint" and "sacrament," "nun" and "convent," "mass" and "litany," "preach"

and "sermon," "cross," "cassock" and "canon," "pilgrim" and "puritan," "heaven," "purgatory" and "hell" (with its Italian variant "inferno"), "mystic" and "ascetic," "apocryphal" and "blasphemy," "divine" and "venerable," "sin" and "salvation," "penance" and "atone."

Then we have words which, though originally religious, have travelled far afield and acquired the most diversified meanings. "Dogma," "creed," "sect," "schism," "heresy," "orthodox," "infallibility," "bigot," "fanatic," "zeal," "inquisition," "hierarchy," "convert," "council," "mediation," "minister," "mission," "anthem" are perhaps more frequently used in political than in religious parlance; so are many verbs in -ize, originally a Christian suffix ("baptize," "christianize," but later also "socialize," "patronize," "Americanize"). "Disciple," "dean," "syllabus," "lecture" are today chiefly educational terms. "Sponsor" and "patron" have gone into the radio; "hood" and "cowl" into the automobile; "aisle" into the theater. Words like "box," "stigma," "indulgence," "charm," "faith," "vow," "relic," "voyage," "vigil," "symbol," "image," "dirge," "credence," "confession," "clerk," "scribe," "chapter," "novice" (and its more learned variant "neophyte"), "lay," "confirm," "millennium," "martyr," "hermit," "grace," "enthusiasm," "iconoclast," "carnival," "abyss," "exodus," "genesis," "miracle," "myth," "jealous," "virgin," "demon," "imp," "omen" have passed into fields completely unconnected with religion.

These terms come from all languages and all religions. Side by side with Anglo-Saxon "tithe" and "gospel," we find Latin "sepulcher," "limbo" and "fate"; Greek "apostle," "monk," "prophet," "epistle," "patriarch," "hymn" and "psalm"; Syriac "abbot"; Hebrew "cherub," "rabbi," "sabbath" and "amen." "Kismet," "harem," "Islam," "muezzin," "mufti," "dervish," "mosque," even "hegira," which many New Yorkers use for "moving-day," are contributed by the Moslem religion and the Arabic tongue; "juggernaut," "mahatma," "purdah," "karma," "avatar," "nirvana" by the Hindu faith and Sanskrit. The Book of Common Prayer presents interesting series of double words of which one is in origin Anglo-Saxon, the other Latin-Romance: "to acknowledge and confess"; "dissemble nor cloke"; "assemble and meet"; "pray and beseech"; "mortify and kill"; "perceive and know"; "power and might."

The history of religious terms is fascinating. In the original Greek,

an "angel" is a "messenger," a "devil" a "slanderer," a "priest" an "elder" ("presbyter" is a form closer to the original; the Presbyterian Church was originally governed by elders); "bishop" is an "overseer" ("Episcopal" is the form that comes close to the original; the Episcopal Church is governed by bishops, or overseers). "Synagogue" is a Greek term, denoting originally not a Jewish, but an early Christian assemblage. The Arabic *fakir* means "poor," "beggar"; but the beggar is also a holy man, who performs miraculous stunts, and thereby gives rise to our "faker" and "fake." "Pagan" and "heathen" are interchangeable terms, the former from the Latin, denoting one who lives in a *pagus,* or village, the latter from the Anglo-Saxon, denoting one who lives on the heath; Christianity spread first in the large cities, leaving the villages and remote country districts untouched in their ancient beliefs. The Chinese "joss house" is not Chinese at all, but Portuguese; the "joss" represents a corruption of Portuguese *Deus* ("God"). The Japanese call fried shrimp *tempura;* this is not a Japanese word, but borrowed from the religious Latin of the early Portuguese traders, who ate only sea-food during the *Quattuor Tempora,* literally, the "Four Times" of the year, or Ember Days.

Latin *gentilis* ("of the same race, nation or people") gives rise to four widely differentiated English words: "Gentile," which carries the Biblical meaning; "genteel," "gentle" and "jaunty." Our "holiday" is in origin a "holy day," the feast of some major Saint. "Tithe" is the Anglo-Saxon word for "tenth" (all people were supposed to contribute one-tenth of their income to the Church); its Latin-Romance counterpart is "dime," from Old French *disme* which goes back to Latin *decima,* the same word that gives us "decimal" and "decimate."

"Demon" is a Greek word, meaning originally a god or divine being, or fate; the "evil spirit" connotation appears first in the New Testament. "Christmas" is "Christ's Mass"; the use of "Mass" for "feast-day" is frequent in the older English language, where we find such words as Candlemas and Michaelmas. "Mass" itself comes from the Latin *missa,* the feminine past participle of the verb *mitto,* "to send"; the origin of this use lies in the priest's command to the faithful, *"Ite, missa est."*

One word that still retains its Latin form, though it is now used almost exclusively in a political sense, is "propaganda"; it comes from

the Catholic organization known as *Congregatio de Propaganda Fide,* which means "Congregation for the propagation of the faith" or, more literally, "the faith to be propagated." "Imprimatur," the term appearing on books that have received the official sanction of the Roman Catholic Church, is straight Latin and means "let it be printed." "Monsignor" is a curious linguistic hybrid, since the *mon* is French while the *signor* is Italian. "Mardi Gras" is French for "fat Tuesday," the adjective referring to the fact that this is the last day on which fat foods (*i.e.,* meat) may be eaten before Lent; its English equivalent is "Shrove Tuesday," in which "shrove" is from the archaic verb "shrive," to confess or absolve, and refers to the custom of going to confess one's sins before Ash Wednesday, on which penance begins.

To take a word from outside the Christian pale, *mufti,* from the Arabic, means "expounder of the Moslem law," or religious judge. British officers in Moslem countries, when they finally obtained permission to wear civilian clothes on their off-duty stretches, had them made of the same fine cloth which went into muftis' garments; hence, "to be in mufti."

The influence of religion is felt not merely in language proper, but even in significant symbols. The early Christians often used a fish as a symbol, owing to the fact that the letters in the Greek word for "fish" (*ichthys*) were the initials of the words in the expression "Jesus Christ, Son of God, Saviour" (*Iesous Christos, Theou 'Yios, Soter*). The *X* in Xmas is not irreverent, but an abbreviation for "Christ," used in early and medieval Christian documents. The *X* is not an *X* at all, but the Greek letter *Chi,* transcribed in English as *ch,* and appearing as the initial letter in the Greek *Christos.* The *X* which serves as the mark of the illiterate in place of a signature is an outgrowth of the sign of the cross, which early Christians placed beside their signature as an attestation of good faith.

The lack of certain religious words (or of their distortions) presents a curious anthropological feature. When a Sioux-language translation of the swear-word "damned" was sought, it was discovered that the tongue of the benighted Indians was superior to that of the white man in that it possessed no swear-words of any kind or description.

But the lack of religious terms in certain languages unfortunately involves more than swear-words. In translating the Bible into the Bulu

language of the Cameroons, missionaries found that "straightness" and "kindness" were the closest they could get to "righteousness" and "grace," while "forgiveness" had to be translated into the Misketo Indian language of Nicaragua by "taking-a-man's-fault-out-of-our-hearts," and into Labrador Eskimo by "not-being-able-to-think-about-it-any-more."

These illustrations may cause us to smile, but they prove two things. The first is that any language can create the necessary machinery for the rendering of a new concept; the second is that when divine grace wishes to find a way to reach men's hearts, it can do so, even by devious ways.

LANGUAGE AND THE FAMILY

Next to God, thy parents.—William Penn

Although anthropologists are not at all in accord as to the origins and sociological implications of the family group, linguists have long been agreed in recognizing that family relationships and their designations are of paramount importance for linguistic studies. It is only fitting that what seems to be the oldest of social institutions should provide one of the best clues for the grouping and affinities of languages. Names of close family relationship are part and parcel of a language's fundamental stock of words, and while some of them may occasionally be borrowed from another linguistic group, there is a natural reluctance to do so. "Father" and "mother" (or their informal equivalents, "dad," "pop," "mamma," "mom") are among the very first words the child learns. He does not easily give them up. So far as English is concerned, it is significant that "father," "mother," "son," "daughter," "sister," "brother" have come down to us straight from our ancestral Anglo-Saxon, whereas the more distant "uncle," "aunt," "nephew," "niece," "cousin" and the "grand" of "grandfather" and "grandmother" were borrowed from Norman-French after the linguistic upheaval caused by William the Conqueror.

It is not surprising to find that a word like "mother" is easily identifiable in all the languages of our group as stemming from the same original word. Irish *mathair,* Latin *mater,* Greek *meter,* German *Mutter,* Russian *mat',* Sanskrit *mata,* definitely point to the kinship of those languages with our own.

The same is true, but to a lesser degree, for "father." The difference in degree is perhaps due to the fact that a child in infancy has a closer

relationship with its mother than with its father. Nevertheless, the display is impressive: English "father," German *Vater,* Latin *pater,* Greek *pater,* Sanskrit *pita,* Persian *pidar,* even Irish *athair* and Armenian *hayr,* show a common origin.

"Sister" and "brother" are almost as conclusive. English "sister," German *Schwester,* Russian *sestra,* Latin *soror,* Sanskrit *svasr,* on the one hand; English "brother," German *Bruder,* Slavic *bratr,* Latin *frater,* Greek *phrater,* Sanskrit *bhrata,* Persian *biradar,* Irish *bhrathair,* on the other, are unmistakable. "Daughter" and "son" display a fair degree of unanimity. The former has relatives in German *Tochter,* Russian *doč',* Greek *thygater,* Sanskrit *duhita,* Persian *dukhtar,* Armenian *tovodr,* while the latter finds its counterparts in German *Sohn,* Russian *syn* and Sanskrit *sunu.*

These fundamental relationships indicate that the basic family unit existed as a well-established institution in Indo-European times. There are enough similarities among the languages of other linguistic groups besides our own to show that the situation was substantially the same in many localities, and that the relationships of "father," "mother," "son," "daughter," "sister," "brother" are among the most ancient and stable in human civilization.

But there are startling exceptions. The natives of the South Sea island of Ponape are reported to have five words for "brother," but none for "father." This state of affairs is probably indicative of a matriarchal social structure, widespread among many primitive groups, in which the identity of the father is unimportant. A distant reflection of the more important social position once held by woman, even in our own group, is perhaps betokened by the German form *Geschwister,* a collective noun formed on the root of *Schwester,* which includes both brothers and sisters. On the other hand, the lead taken by the male sex in Latin countries is reflected in Spanish *padres* (literally "fathers") used for "parents," by the use of *hermanos* ("brothers") to include both brothers and sisters, and of the masculine plural *niños* ("children") and *hijos* ("sons") to denote children of both sexes.

As a reflection of social custom, it is interesting to notice the various subsidiary concepts which assume importance in connection with names of relationship in different languages. The concept of relative age, for instance, is paramount in the Far East. Chinese, Siamese, Burmese,

Tibetan, Japanese, Korean, Malay, and the Tamil and Telugu of southern India all use an entirely different word for "brother" according to whether one means an older or a younger brother. On the other hand, the concept of gender is relatively unimportant in some of these tongues. In Malay, *saudara* is used indifferently for "brother" or "sister," provided it is an older one.

When it comes to more distant degrees of relationship, similarity among languages of the same group is far less in evidence. Also, some languages display a considerable measure of confusion, often coupled with extreme niceties of distinction. Italian lumps together "nephew," "niece," "grandson" and "granddaughter" into a single word, *nipote,* distinguished for gender only by accompanying words, such as articles or adjectives. This confusion in part goes back to Latin, where *nepos* and *neptis,* originally "grandson" and "granddaughter," were extended in Imperial times to cover the additional meanings of "nephew" and "niece." The only explanation that can be vouchsafed for this shift lies in a general spirit of vagueness with regard to the more distant relationships. Another example of this is the Latin-Romance handling of terms meaning "uncle" and "aunt." Latin distinguished between a father's brother (*patruus*) and a mother's brother (*avunculus*), as well as between a mother's sister (*matertera*) and a father's sister (*amita*). In the general linguistic transformation that followed the fall of the Roman Empire, *patruus* and *matertera* were lost; *avunculus* emerged with the meaning of both maternal and paternal uncle, giving rise to French *oncle,* German *Onkel* and English "uncle"; while *amita,* extended in similar fashion, became *tante, Tante* and "aunt." Why the *mother's* brother, but the *father's* sister survived in the elimination process has not been satisfactorily explained. Spanish and Italian, incidentally, gave up the entire series of Latin words, replacing them with Greek *theios,* from which they derived *tío* and *zio.*

Strong symbolism appears in some names of family relationship. "Uncle" in many Italian dialects assumes the form "beard" (*barba*). The uncle is the "bearded man," the strong man who protects you if your parents fail you. There is in medieval French and Italian literature a vast array of uncles as natural protectors, which starts with the role of Charlemagne, the uncle of the great epic hero Roland. That the symbolism is one of strength is proved by the fact that the same

word for "beard" gives rise in Rumanian to the generic word for "man" or "male" (*barbat,* from Latin *barbatus,* "bearded").

Forms like "grandfather" and "grandmother" appear in French as well as in English and German, which borrowed them from French. *Magnus* "great," had previously been applied to *avunculus* in Latin, with the meaning of "granduncle." Spanish and Portuguese, however, use words for "grandparents" which originally meant "little ancestor," just as Russian uses for "grandmother" a term that means "little old woman" (*babushka*). Italian uses words of religious origin (*nonno, nonna*), coming from the same root that gives us "nun."

Since the Russian word for "cousin" literally means "tribesman," the suspicion is aroused that a tribal or community spirit prevailed in Russia concerning the more distant relations until comparatively recent times. German, which uses a Germanic word (*Vetter*) for a male cousin, but a borrowed French word (*Cousine*) for a female cousin, also indicates a measure of uncertainty. Spanish *primo,* which comes from the Latin word for "first," with the "cousin" itself left out, stresses the degree of relationship; so does the Russian *dvoyurodny brat,* "twice-removed brother." Rumanian uses *văr,* from Latin *verus,* "true" or "real"; here it is the authenticity of the relationship that is stressed.

The names of in-law relations display linguistically interesting features. German uses a series of forms (*Schwieger, Schwager, Schwäger*) which are akin to Latin *socer* and *socrus* ("father-in-law," "mother-in-law"), and which appear also in Sanskrit, Russian, and other tongues of the Indo-European group. Italian and Spanish generally follow the Latin forms, but Spanish has developed a "political brother" (*hermano politico*) for "brother-in-law" which shows the same legalistic line of thought as our own English "in-law." Another Spanish word for "brother-in-law" is *cuñado,* which, like Italian *cognato,* of the same meaning, goes back to Latin *cognatus* which meant "related by blood or birth," an evident semantic shift of major proportions.

French, breaking completely away from the Latin tradition, instituted a series of "beautiful" names for in-laws (*beau-père, belle-soeur, beau-fils,* etc.) which becomes significant when we remember the old English custom of using "fair" in polite address. *Belle-mère* ("beautiful mother") to a mother-in-law is convincing proof that French is *par excellence* a diplomatic language. Side by side with the "beautiful"

forms, French has another term for "daughter-in-law," *bru,* which comes from the Germanic and is akin to our own "bride" and German *Braut.*

Russian uses the identical word for son-in-law and sister's husband, but a different word for husband's brother. In like manner, daughter-in-law and brother's wife are expressed by a single word, but husband's sister by another word. Russian also uses different words for father-in-law and mother-in-law according as they are the husband's or the wife's relatives, duplicating a state of affairs that appeared also in Latin. The Russian term for daughter-in-law or brother's wife, *nevyestka,* is drawn from the root of *nevyesta* ("fiancée"), practically paralleling the French *bru.*

The Japanese, whose language frequently assumes a double or even a triple aspect by reason of formulas of politeness, use two entirely different series of words for relations according as the word is used to denote the speaker's own relatives or those of the person addressed. *Chichi,* for instance, does duty for "father" when I am speaking of my own father, but *otōsama* is needed if I speak of your father. *Musume* is "my daughter," but *ojōsan* "your daughter." In the polite words, the suffixes *sama* and *san* ("Mr.," "Mrs.," "Miss") are regularly discernible. They fulfill the same function that is supplied in French by *monsieur* in *monsieur votre père,* or in Spanish by *señora* in *su señora madre.*

Affective connotations play a rather large role in the creation of names of relationship. This is well borne out by Italian, where the present-day words for "brother" and "sister" (*fratello, sorella*) were originally affectionate diminutives meaning "little brother," "little sister." Spanish *abuelo,* originally "little ancestor" for "grandfather," and French *petit-fils* ("little son") for "grandson" may be other cases in point. The Russian word for "father," *otyets,* which differs so widely from the general Indo-European pattern of "father," *pater, pita,* etc., was originally an affectionate diminutive related to the Gothic *atta.* Both words are probably connected with our own "dad."

Linguistic oddities in names of relationship abound. The Chinese word for "mother," despite the lack of kinship between Chinese and the western tongues, is *ma.* In another totally unrelated language, the Otetela of the Belgian Congo, "my father," strangely enough, is *papa;* but here the similarity ceases: "your father" is *sho,* "his father" *shi,*

"our father" *shesu*. The Japanese for the speaker's mother is a laugh: *haha*. In the Georgian of the Caucasus, *deda,* although it sounds like "dad," is "mother," while *mama* means "father."

One curious family custom which contains a definitely linguistic, though negative, feature is the tribal taboo of the Navajo Indians whereby a mother-in-law and a son-in-law are forbidden all spoken intercourse with each other. Among the present-day Navajos, however, this prohibition, where it is still observed, is conveniently gotten around by speaking to a present third party, or by seemingly addressing a wall.

LANGUAGE AND MATERIAL EXISTENCE

With words alone, you don't make the soup.—Rumanian proverb

Man's primary needs are summed up by sociologists in the triad "Food, Clothing and Shelter." The first is basic, the other two contingent. In some island paradises of the South Seas, man can practically dispense with both. Nowhere can he dispense with food.

Eating is probably the oldest, though not the noblest, of human activities. The interaction of food and language must therefore have taken place at a very early date. From the dark days when human beings ate one another there come down to us certain terms that make us shudder. "Cannibal" is a comparatively modern word, devised by the Spaniards at the time of the discovery of America. Some say it was first applied by Columbus himself in the form *Caríbal* to describe the anthropophagous Carib Indians, and that it was later changed to *Caníbal* by getting confused with Latin *canis* ("dog"). But the ancient Greeks, many centuries earlier, had devised the term *anthropophagoi* ("man-eaters"; Herodotus calls them *androphagoi*), which they applied to a people of Scythia who ate human flesh.

Samoyed is the Russian name of a Siberian tribe, as well as of a breed of dogs. The Russian term means "self-eating," and was first applied when the Russians thought they discovered traces of cannibalism among the Samoyeds. *Nyam-Nyam* is the name of an African tribe, said to have been coined in imitation of the noisy sounds accompanying cannibalistic feasts. "Long pig" is not a western euphemism for a human body roasted on the spit by cannibals, but an actual literal translation of *puaka enata,* a widespread Polynesian term from the South Seas Marquesas Islands.

Cannibalism as a deliberate practice is characteristic only of the lowest grades of civilization. At the other end of the line, there is not only refinement in food, but also intimate collaboration between food and language in the form of recipes and cook-books.

The oldest cook-book of which we have a record is a Chinese one that goes back some 4,700 years. It was compiled by the Emperor Shen Nung, and elaborated by three great Cantonese chefs named I Li, Li Chi and Chou Li. The Chinese are poets as well as cooks. A soup of pigeons' eggs is called "golden moons on a silver sea"; a dish of sharks' fins and eggs bears the title, "10,000 arrows piercing the clouds"; cabbage shoots on crab roe is named "jade growing out of coral," while a dish of pork sausage and chicken is titled "famous scholar's abandon."

The Hindus believed that all foods and forms of cookery were specifically created by the gods, and in the fifth century A.D. all references to food appearing in the Vedas, Upanishads, and other holy books of the Hindus were carefully collected and separately issued by the Brahmin Khema Sharma.

Archestratus of Gela, a friend of Epicurus, composed for the ancient Greeks a work entitled *Heduphagetica* (*Sweet Eating*), which contained the recipes of the Greeks; it was unfortunately lost, but parts of it survive in a Latin translation.

The Roman writer Apicius composed in the third century A.D. a book entitled *De Re Coquinaria* (*About Cooking Matters*), in which the dishes of the fastidious Romans were described. The memory of Lucullus, prince of Roman gourmets, survives in our present-day adjective "lucullan," applied to repasts.

How food can contribute to language-growth is spectacularly illustrated by the Romance words for "liver" (French *foie,* Spanish *hígado,* Italian *fegato,* etc.). The ancient Romans were fond of fig-stuffed liver, *iecur ficatum.* As time went on, the Latin word for "liver," *iecur,* disappeared, leaving only the adjective "fig-stuffed" to do service for the noun. It is from *ficatum* alone that the Romance forms are derived.

The fact that in English comparatively few names of foods, particularly among the fruits and vegetables, are of Anglo-Saxon origin is explained on the ground that many of them were discovered or imported only in relatively recent times. Among foods that were un-

known in Europe until after the discovery of America are potatoes, maize, tomatoes, chocolate and cocoa. But even in the matter of meats, which were well-known to our Anglo-Saxon forebears, there was a noticeable shift of names that occurred after the Norman conquest. Gurth, in *Ivanhoe,* remarks that food animals are Anglo-Saxon while alive (ox, calf, swine), but become Norman-French after they are slaughtered (beef, veal, pork). Could this be because meat had largely become the prerogative of the Norman upper classes?

A great many of our common eating-terms are borrowed from foreign languages. "Delicatessen" and "ersatz" come to us from the German. The former is "delicate eating," the latter a term for "substitute" in general, but more particularly applied to food. "Table d'hôte" literally means "host's table" in French, and "à la carte" is "by the menu." In the first of these two different fashions of dining, you take a complete meal at a set price; in the second, you order from the menu and pay separately for each item. "Pièce de résistance," also from the French, means "resistance piece" or main course, the item on the bill of fare that will stand up and take punishment. A native American eating term is "square meal," so named from the fact that in New England in the late eighteenth century food was prepared in square tins.

A few terms taken at random from the restaurant list will show our indebtedness to foreign tongues. What some people call "appetizers," on the doubtful theory that they stimulate appetites which as a rule need no stimulus, others call hors d'oeuvre. This French term literally means "outside of work," referring to the fact that the *hors d'oeuvre* is eaten outside the regular meal. The Italian *antipasto* means "before meal." *Smörgåsbord,* the delectable Swedish tableful of assorted delicacies, has the modest literal meaning of "buttered-bread table." An Italian *minestrone* is "big soup," with reference to the number and variety of the ingredients. A Russian *borsch* comes from a root that means "prickle," perhaps a reference to the stimulation of jaded appetites. The exotic East Indian *mulligatawny* is in its native Tamil *milagu-tannir,* or "pepper-water"; and "curry," also from the Tamil of southern India, is originally *kari.* The naturalized *gumbo* soup comes from the *ngombo* of one of the African Negro tongues of Angola; one of its indispensable ingredients is *okra,* also of African

origin. "Goulash" is a Hungarian stew of beef and vegetables flavored with paprika; its native form is *gulyás* or *gulyáshús,* "herdsman's meat." "Chowder" is related not to "chow," but to the French *chaudière,* "cooking-pot," which in turn goes back to Latin *caldaria.*

"Biscuit" is half Latin, half French, and means "twice-baked"; in the days of sailing ships it was difficult to keep bread from spoiling, but bakers discovered that if the bread was baked twice it would keep much longer. The German *Zwieback* is a literal translation of the Latin-French *biscuit,* and crackers and hardtack are still called "biscuit" in England. The sandwich owes its name to an earl of Sandwich who, being inordinately fond of card-playing, felt he could not leave the gaming-table long enough for a regular meal, but munched at slices of beef between two slices of bread as he played.

National customs and ways of life are often revealed in terms of food and its nomenclature. The French enjoy the well-deserved reputation of being the world's finest cooks, and the term *cuisine française* has spread to all countries of the earth as the synonym of what is best in cookery. What many do not know is that side by side with the *cuisine française* there exists also in France a *cuisine canaille* ("rapscallion cookery") which is in vogue among the lowest classes. The chasm between *cuisine française* and *cuisine canaille* is a reflection of social and economic differences which are fundamental.

The Italians, like most Latin races, are great eaters of bread. Italy's economy does not permit bread to be regarded as a mere accessory of the dinner-table, as is the case with us. Accordingly, the Italians have devised the word *companatico,* a convenient generic term meaning "anything that is eaten with bread." Italian also speaks of "earning your bread and wine" where English speaks of "earning your bread and butter." Bread, it will be noticed, enters both national expressions, though with a different partner. The "staff of life" is, of course, standard in the tongues of the western world. The "bread" root is common to all the Germanic tongues, the *panis* root of Latin to all the Romance languages, while the Slavic tongues use *khleb,* which is etymologically related to our "loaf" (*hlaifs* in ancient Germanic). What we often forget is that the majority of the world does not eat bread. To the rice-eating Japanese, for instance, "bread" is a loan-word, *pan,* imported along with the object itself by seventeenth-century Portuguese traders.

The Catholic Eskimos have an interesting variation in the Lord's Prayer which runs "Give us this day our daily fish."

There is another Italian staple, called by the generic name of *pasta* ("dough"), whose many ramifications (*spaghetti, macaroni, vermicelli,* etc.) display to a superlative degree the interrelation of language and food. *Spaghetti* is literally "little pieces of cord" and *vermicelli* "little worms." What goes by the name of "spaghetti" in America is "vermicelli" in Britain, whereas in Italy the two names apply to two different thicknesses of the same basic product. "Spaghetti," "vermicelli" and "macaroni," along with "zucchini," "broccoli" and a few other food-names, illustrate the tendency of languages to borrow the name of an object along with the object itself when the latter was previously unknown. They also illustrate another tendency of languages to adapt the borrowed names to their own requirements and notions. In Italian, all these nouns are plural, and require plural verbs; in English, we choose to view them as collective singulars and accordingly say, "The spaghetti *is* on the table," which makes Italians laugh.

The food *macaroni* seems to have existed as far back as the eighth century, at which time a Greek lexicographer records *makaria* (literally, "blessed"), and describes it as "a food made out of dough and sauce." Over five hundred names of different macaroni products have been recorded in Italy. The products themselves are not so numerous, but different regions of Italy use different names for the same product. The only limit to the number of ways of preparing macaroni products is the number of individual Italian localities.

"Chocolate" and "tomato" come to us from the language of the Aztec Indians of Mexico, "potato" and "maize" from the tongues of the North American Indians. The tomato, however, before settling down to its original Aztec name, was known by a variety of picturesque European names, such as "wolf peach" and "love apple"; in Italian it is still called "golden apple" (*pomodoro*). The Europeans at first believed it to be a flower, and poisonous if eaten, and used it only for decorative purposes. The potato, for its part, was in disrepute some centuries ago. Some Englishmen who did not fancy potatoes formed a "Society for the Prevention of Unwholesome Diet." The initials of the main words in this title gave rise to "spud." The French *pomme de terre* means "earth apple," and the orginal German *Erdapfel* is a

literal translation of the French. *Kartoffel,* the more common modern German term, has the same origin as French *Tartuffe* and English "truffle"; all these words go back to Latin *terrae tuber,* "a tuber of the earth." But not all commonly eaten vegetables go back to the discovery of America. Some were well known in remote antiquity (oldest, apparently, is the onion, mentioned in Egyptian inscriptions). *Finocchi* is the Italian name of a vegetable otherwise known as "fennel" or "anise"; both "fennel" and *finocchi* come from the Latin *foenuculum* ("little hay"). "Celery" gets its name from *selinon,* the Greek word for "parsley"; celery was given as a prize to winners in the ancient Greek sports arenas. Garlic, despite its use by foreigners, is a pure Anglo-Saxon word, originally meaning "spear-leek." Its Latin name is *alium,* from which French *ail* is derived. Provence, the southern part of France, has been nicknamed by the French *la terre frottée d'ail* ("the garlic-rubbed land"), by reason of the abundant use of garlic in Provençal cookery.

Tukki is a Hebrew word that appears in the Old Testament with the meaning of "peacock." This seems to have given rise to our "turkey." Hebrew merchants in Europe, to whom Spaniards in America sent the fowl, mistook them for peacocks. The French call a turkey *dinde* or *dindon;* this was originally *d'Inde* ("from India"), and shows a misconception as to the bird's original habitat, paralleled by the Italian word for maize, *granturco* (or "Turkish grain"). The Turks call the turkey "American bird," which is geographically correct.

That beefsteak and roast beef were originally native English dishes is proved by the forms they assume in the languages that have borrowed them. Portuguese uses *bife* for "beefsteak," taking the whole for a part; French uses *bifteck,* Spanish *bistec,* Italian *bistecca,* Russian *bifshteks,* Japanese *bifuteki. Beefsteak mit Hindernissen* ("with hindrances") is the picturesque German term describing a garnished steak. Roast beef assumes the form *rosbiffe* in Italian and *rosbif* in both French and Spanish.

Among meat dishes we have acquired from abroad in return for our steaks and roast beef may be mentioned *shish kebab,* a tasty Turkish dish of skewered lamb, which is what the name means. Its Russian-Caucasian variant, *shashlik,* comes from the Turkish *shish* ("spit"), and the suffix *-lik.* The *Wiener Schnitzel* is simply a "Vienna slice," a

very thin veal cutlet, breaded and fried. *Chop suey,* though not an authentic Chinese dish, has its origin in the Cantonese *chap siu* ("roast pork"). *Sukiyaki,* the Japanese dish consisting of thinly sliced beef, plus a mixture of vegetables, stewed together in soy sauce and chicken broth, has the literal meaning of "spade roast"; in accordance with Buddhist practice, if one dares to eat the meat of four-legged animals, the cooking should at least not be done with household utensils, and should preferably take place out of doors; an old spade might therefore be used for such cooking. There is a Chinese variant of *sukiyaki* called *da-ban-lo.*

The Spanish *cocido* (or "stew") is perhaps better known by the name of *olla podrida,* or the French equivalent *pot pourri.* These terms literally mean "rotten pot," indicating that spoiled meat was used in the Middle Ages, when refrigeration was unknown. The condiments would disguise the flavor. Both *pot pourri* and *olla* have come into English (the latter also under the form *olio*) to indicate a hodgepodge or medley. "Hodgepodge" itself comes from an earlier "hotchpotch" and a still earlier "hotchpot," from the French *hochepot,* a "shaken pot" of many ingredients. "Hotchpot" has passed from the domain of cookery into that of the law, to denote the throwing together of property into one stock for equal division.

Cheeses generally take their names from their places of origin. Cheddar cheese, for instance, comes from the English town of Cheddar, which began manufacturing this cheese in the seventeenth century. Limburger is so called because it originated in the Belgian province of Limburg. Parmesan gets its name from the city of Parma, in northern Italy. Some cheeses, however, have more interesting names. Liederkranz means "singing circle" cheese. The *Liederkranz* is a German singing society, and members of such societies would normally retire to drink beer and eat cheese after their choral efforts. Camembert was named by Napoleon after the peasant woman who originated the cheese, and to whom there is a statue in a market-place in Normandy.

As we have already seen, when a nation borrows a dish from another the name generally goes with the dish, enriching the borrower's vocabulary. Wholesale borrowing from English is displayed by Japanese in the case of western foods, drinks, and even tableware. "Butter" is *bata;* "soup" is *soppu;* "chop" is *choppu;* "ham" is *hamu;* "bacon" is

beikon; "sauce" is *sosu;* "salad" is *sarada;* "cheese" is *chiizu;* "lemon" is *remon;* "dessert" is *dezātō. Biru* and *ķohi* are the forms taken by "beer" and "coffee," while "knife" is *naifu* and "fork" is *fōķu.*

A food-and-language story of recent occurrence serves to prove that food is food, regardless of the language in which it may be clothed. During the filming of a restaurant scene for *Arch of Triumph,* this exotic item on the luncheon menu was spotted by the hungry extras: *"Petite saucisse de Frankfort braisée dans la choucroute à la mode alsacienne."* When the food arrived, they all exclaimed almost in unison: "Hot dogs and sauerkraut!"

Drinking is, in a sense, the acme of social living. Conviviality, the art of "living with" other people, depends to a large degree upon the ability to partake, in moderation, of the heart-warming beverages that a bountiful nature has placed at mankind's disposal.

The Bible describes wine as having been accidentally discovered by Noah, and in the same breath issues a warning against the dangers of over-indulgence. The New Testament describes the turning of water into wine by Christ at the marriage feast of Cana. Is wine actually the oldest of fermented drinks? Whether it is or not, there is more in the way of linguistic tradition about the juice of the grape than about all other beverages put together.

Vinum, from which practically all modern languages get their word for "wine," appears in Latin, but seems to have been borrowed by Latin speakers from Etruscan or, perhaps, from the "Mediterranean" language that preceded the coming of the Indo-Europeans on the shores of the great inland sea.

Famous wines often bear the name of the region to which they are native. Such is the case with the French Champagne, Burgundy and Bordeaux, the Italian Chianti, the German Rhine wine, and the Hungarian Tokay. Champagne is the name of the famous French wine-growing district whose Latin name was Campania ("land of fields"). "Sherry" is the English form of Spanish *Xerez,* originally produced in a district close to the Portuguese border, called Xerez de la Frontera. Another Spanish wine is called *manzanilla* ("little apple"), but is definitely made with the juice of the grape, not the apple. "Port" comes from the name of the Portuguese city of Oporto,

which itself means "The Port"; according to one etymology, the left side of a ship is called the port side because the red lantern displayed on that side was once the color of port wine.

One famous Italian wine bears the Latin name of *Est Est Est* ("It is! It is! It is!"). According to the story, a notable who went on a journey sent an envoy before him to sample the wines of the various localities through which he was to pass, with instructions to write *Est* ("It is!") wherever the wine was good. When the envoy reached Montefiascone (the name of the locality means "big bottle mountain") he found the wine so good that he gave it the medieval equivalent of three stars.

Muscatel comes from the nutmeg, or *nux muscata,* which in turn gets its name from Muscat in Arabia. By popular etymology the Italians believe that its name is due to the fact that its sweet flavor draws flies (*mosca* is the Italian for "fly"), so that to them the name means "wine with flies in it." This does not keep them from drinking *moscato.*

Where there are no grapes, other fermented beverages are used. They, too, have their linguistic tradition. The ancient Celtic name for beer is *cerevigia,* the "drink of Ceres," goddess of grain. French *cervoise,* Spanish *cerveza* and Italian *cervogia* still bear Ceres' name. Porter beer is so called because at first its chief consumers were porters and other members of the laboring classes, while Lager beer, from the German, is beer that "lies" in storage for some months before being consumed.

Sake is the Japanese rice wine, best served warm. The Japanese believe, erroneously, it seems, that the name *sake* comes from *sakae,* "prosperity," the association being that you feel prosperous when you drink.

The fermentation of honey supplied the ancient Norsemen with the drink of bards and warriors, "mead," a word associated with an Indo-European root meaning "honey" or "sweet." Our early settlers in both New England and Virginia knew mead under the name of "metheglin," and served it on festive occasions.

More potent and less beneficial than fermented drinks are the products of distillation. *Eau de vie,* the French name for brandy, comes down straight from the Latin *aqua vitae,* the "water of life."

Exactly the same idea appears in *whiskey,* which is from the Irish *uisge beatha.* The Swedish *aquavit* is merely borrowed from the Latin. The Portuguese call their strong brandy, usually taken on an empty stomach before breakfast, *mata bicho,* or "vermin killer." *Vodka* literally means "little water."

Mixed drinks have interesting names and origins. The drink "punch" comes not from the effect, but from the Sanskrit *panj,* meaning "five"; it was so named because it originally contained five ingredients. The origin of "cocktail" is controversial. Without going into the various etymologies that have been advanced, it may be remarked that its Spanish variant is *coctel,* its Russian variant *koktail.* The latter consists of straight vodka in which orange peel has soaked for twenty-four hours.

Beyond the elemental need of a protection against the outside weather, which our primitive ancestors supplied by wearing the skins of animals they had killed, clothing is largely a matter of deference to social custom. This is to some extent proved by the fact that our "garb" is derived from Italian *garbo,* which in the broadest sense means "social grace." "Costume" and "custom" were also originally the same word, Latin *consuetudo,* meaning "what is customary."

The names of many ancient garments have come down to us, together with their description. The *chiton,* or tunic, of the ancient Greeks got its name from the Semitic *kuttōneth.* Joseph's "coat of many colors" was a *kuttōneth.* Among the garments mentioned by Homer in his *Iliad* and *Odyssey* are the *peplos* and *himation.* A later Greek garment was the *chlamys.*

A few of our present-day garments derive their names from the languages of the Middle Ages. "Jacket" is derived from the name of a medieval piece of armor, the *jacque,* though it has also been described as going back to the garment worn by the rebel peasants in France's fourteenth-century peasant revolt, *la Jacquerie,* which was named after the derisive designation given the peasants by the nobility, *Jacques Bonhomme* ("James Goodman"), a sort of John Q. Public of the period. The earlier form of "pants" is "pantaloons," so called because they were in vogue among the Venetians, whose patron Saint was

San Pantaleone. The name of the Saint goes back to Greek, in which language it means "all merciful."

Still other names of garments come from the eastern countries. "Kimono" is Japanese, "pajama" Hindustani, in which language it means "leg-garment." Also from Hindustani is "bandanna," from *bāndh,* related to our "bind" and "band." The "kummerbund," despite its German appearance, is from Hindustani *kamarband* ("loin-band"). The "fez," a form of skull-cap, usually red and having a tassel, takes its name from the city of Fez, in Morocco. The *tarboosh* is a maroon velvet fez. The *kufiyah,* or headkerchief of the Arabs, gives rise to the Italian *cuffia* and the French *coiffe,* and ultimately to such words as *coiffure* and *coiffeur.* The true Malayan *sarong* is a garment sewed front and back; similar to it, but more glamorous, is the Tahitian *parou,* which resembles the garment worn by Dorothy Lamour, and is adorned with brilliants and gold sequins.

Names of materials often come from the cities of the east and west. "Shantung" is the name of a Chinese province. "Madras" and "calico" come from the cities of Madras and Calcutta in India. "Cashmere" comes from the name of an Indian state, "muslin" from the city of Mosul in Iraq. "Worsted" comes from the name of the English town (Worstead) where it originated, while "gingham" and "lisle" represent the towns of Guincamp and Lille in France, and "poplin" is *papeline,* or "pertaining to the Pope," because first manufactured at Avignon, a Papal seat.

Some articles of attire have a modern origin. Our "cravat" goes back to a curious misunderstanding. When Paris was occupied by the Allies after Napoleon's downfall, the French admired the great neck-scarves worn by the Croatian cavalrymen in the Austrian army. They inquired in French what they were called. The Croats thought the inquiries were about themselves, and cheerfully replied "Hrvati." The name stuck even after the *malentendu* was cleared up.

Babushka ("little old grandmother") is applied by the Russians also to the kerchief worn about the head by their women. We have borrowed both the object and the name. On the other hand, we have not lagged behind in offering other countries our own objects of attire. In Spain, a long-sleeved woman's sweater is called *rebecca,* because Joan Fontaine wore such a garment in the film *Rebecca.* In the Soviet

Ukraine, the local name for a beauty shop is *amerikanka* ("American woman").

Accessories and their names might lead us too far afield. It is of interest, however, that "lavalliere" comes from the name of Louise de la Vallière, mistress of Louis XIV, and that "umbrella" and "parasol," both from the Italian, indicate the purpose for which the articles are primarily used in Italy, to ward off the sun. The same idea appears in the Spanish *sombrero* ("hat"), from *sombra* ("shade"). French *parapluie* and German *Regenschirm,* on the contrary, are "warders off of rain," which in the northern countries presents more of a problem than the sun.

It is a matter of doubt whether the generic idea of shelter was at first associated with protection from the elements or concealment from one's enemies. The English "house" is related to the verb "to hide"; "hall" comes from an old Teutonic root *helan* ("to conceal"); the Latin *cellarium,* from which we get "cellar," is connected with *celare* ("to hide or conceal"). The caves of our ancient ancestors, the cliff-dwellings of southwestern Indian tribes, the villages on stilts in the middle of lagoons, one of which gave rise to Venice, hold in common the elements of concealment and defense. The latter predominates in "garret," which come from the Old French *garite* ("watchtower"), which in turn goes back to a Germanic root found also in "guard" and "garrison"; Spanish *garita* and Italian *garitta* ("sentry-box") are the precise etymological equivalents of "garret."

Side by side with the concept of concealment or defense appears the idea of "dwelling" or "staying," which transpires in such widely scattered forms as the Sioux Indian *ti-pi* (or "tepee"), a verb-form meaning "they dwell," and the French *maison* and *manoir* (our "manor"), both derived from the Latin verb *manere* ("to remain").

Types of dwellings for whose names a satisfactory origin cannot be found are numerous. They include the *nuraghi,* prehistoric tower-like structures found in Sardinia, said to go back to the Phoenicians, and the *trulli,* strange conical-shaped dwellings found in the heel of the Italian boot, probably a relic of the ancient Messapians.

Extraordinary transformations in meaning are in evidence among names of dwellings. The Latin *casa,* from which Spanish and Italian

derive their general word for "house," was in origin a tent, or at the most a hut. "Palace" is Latin *palatium*, which gets its name from the Palatine hill, but the hill itself was named after the verb *palari* ("to wander or graze"), the hill having once been a grazing-place for sheep. A return to the primitive is indicated by one of the Russian derivatives of *palatium, palatka,* which means a tent. *Domus,* the regular Classical Latin word for "house," appears in numerous Indo-European languages, including Russian (*dom*). It gives rise to our "domicile" and "dome," and to the Italian *duomo,* or cathedral, the "house of God."

A castle and a château are both of military origin, coming from *castellum,* a diminutive of the Latin *castra,* which was a soldier's camp. "Camp" itself, on the other hand, is originally an open field. Latin *castra* reappears in English "-cester" and "-chester," and in the Spanish *alcázar,* which is an arabized version.

"Court" and "yard" have approximately the same original meaning (enclosure), but one is Latin, the other Anglo-Saxon. "Home" is connected with the "-ham" that appears as a suffix in many English place-names (Birmingham, Gotham, etc.), and with the German -*heim* of Mannheim and Hildesheim.

Names of dwellings come from varied sources. "Wigwam" is contributed by the American Indians, "igloo" by the Eskimos, "yurt" by the Mongols, the South African "kraal" by the Dutch-speaking Boers, who had previously borrowed it from Spanish and Portuguese *corral,* precisely the same word encountered in our Southwest. "Compound" is the Malay *kampong* ("enclosed village"), while "bungalow" comes from the Bengali tongue of India. "Belfry" is the Germanic *Bergfriede* ("mountain peace"), while "penthouse" is the French *appentis,* from the Latin *appendicium* ("annex").

Architectural and ornamental styles for the more pretentious dwellings of civilized communities bear names which are for the most part self-explanatory, like "Romanesque," "Arabesque," "Elizabethan," "Georgian" and "Colonial." "Gothic" was not originated by the Goths, who had been absorbed into the populations of the Roman Empire centuries before the style came into vogue; it was both a misnomer and an afterthought created by the men of the late Renaissance who used the term in a disparaging sense to describe all that was medieval

and therefore backward. "Baroque" is French for "grotesque" (itself an architectural term used originally to describe the weird pictorial adornments found in the grottos of the ancient cave-dwellers); French, however, borrowed it from Spanish *barrueco,* a term applied to an irregular-shaped pearl, then extended to denote anything irregular in shape. "Rococo" comes from French *rocaille* ("heap of small stones"), and is descriptive of the decorative effect of the style.

Groups of dwellings are indicative of a relatively high order of civilization. *Villa* was the name originally applied by the Romans to a country estate. During the early Middle Ages, many of the old Gallo-Roman cities of France became deserted, and the population regrouped itself around the *villa,* or manor, of a feudal lord who could afford some measure of protection. As a result of this social-historical change, the French partly relinquished their old word *cité,* which had already entered English in the form of "city," and *ville* became the general French term for a city or town. *Cité* had arisen from Latin *civitas,* which had rather the meaning of "city-state" than that of "city" pure and simple, for which Latin used *urbs.*

In food, attire and shelter, we are faced with the lower manifestations of what sociologists call the "ethos," which Aristotle defines as that element of character which determines what man thinks and does, the spirit that actuates manners and customs. It is no more than natural that a people's ethos should be widely reflected in that people's language, and that language, once established, should in turn influence the ethos, setting up what may be styled, in modern parlance, a chain reaction which is to all intents and purposes infinite. There is no doubt that the ethos of the ancient Gauls and Iberians was fundamentally changed when they came in contact with the Romans and their language, or that the ethos of the Anglo-Saxons was radically affected by their contact with the French-speaking Normans, who brought to them new ideas couched in new words.

One important question which the sociologists have not yet attempted to answer is this: Granted the interrelation of ethos and language, which in the past has always been of an incidental and accidental nature, to what extent would it be possible to change the ethos of future generations by a deliberately planned change in their language?

LANGUAGE AND ECONOMIC RELATIONS

Language is a steed that carries one into a far country.—Arab proverb

Trade is coeval with civilization. When man first began to expand the field of his activities beyond the narrow confines of the family circle and the hunt for the barest necessities of life, the need for barter and exchange of products began to make itself felt. This must have exerted a powerful influence on the creation and development of language, since bartering, to become effective, needs a means of communication and understanding. Barterable objects require names unless they are directly at hand, and can be pointed to; the terms of exchange must be set in some sort of intelligible language; the medium of exchange, to be created and established, requires a measure of acceptance based on mutual understanding. As commerce becomes more complex, specific measures, weights, numbers, dates must be set.

Under the circumstances, it is not surprising that some of the most sought-after products which mark the progress of man from the age of stone to the age of metals appear among the oldest linguistic forms that have come to our knowledge. The term for "iron" is to be found in some of the most ancient languages of which we have a record. Tin and copper, the two metals which in blended form lead to the Bronze Age, are repeatedly mentioned in the Bible and other ancient books. The name of copper comes from the island of Cyprus, where the metal seems to have been first found in abundance. The relentless search for tin led to early exploits in navigation on the part of the Phoenicians, who reached both the Iberian Peninsula and the British Islands, which they called the "Tin Isles," and planted Phoenician-speaking colonies along the shores of the Mediterranean.

The repetition of these exploits, in more recent times, by trader-navigators of the modern nations, has by the same process enriched the modern languages with words like "copra," "kapok," "cinchona," "caracul" and "mahogany."

The role of trade in language-formation is more generally underestimated than is the role of language as an auxiliary to trade. It is primarily to the desire for trade that we owe the creation of the many pidgin languages that encircle the globe. Malay, the tongue of some seventy million people in the Dutch East Indies, is primarily a compromise trade-language used by persons who speak various related, but mutually incomprehensible Malayo-Polynesian tongues. Chinese-English pidgin sprang into existence because of the desire of English-speaking traders to communicate with Chinese-speaking customers in the South China ports. Spreading to the South Sea islands, Chinese-English pidgin turned into Melanesian-English pidgin. The *lingua franca* of the Mediterranean basin in medieval times was essentially a trade-language that served as a common means of intercourse for speakers of Italian, French, Spanish, Greek and Arabic. Some linguists superficially attribute the creation of the literary Italian tongue to Dante. But it is common knowledge that this literary Italian language was in existence and use at least a century before the time of Dante, and it is not unreasonable to suppose that it first arose as a trade-language, designed to facilitate commercial exchanges among traders from the great seafaring city-states of Genoa, Venice, Pisa and Amalfi, whose local speech varieties diverged to the point of mutual incomprehensibility. Today, one of the chief arguments for the use of English as an international language is based on the extensive commercial importance of our language.

At the same time, it is generally recognized by all who have had experience in the field of international trade that nations like to do business in their own language. The corollary of this proposition is that the commercial incentive acts perhaps more strongly than any other as a spur to language learning and polylingualism.

American business houses have learned, often the hard way, that it does not always pay to insist on using English in international trade, with the result that they have founded institutes like the American Institute for Foreign Trade, located at Phoenix, Arizona, where young

men are trained for commercial service in the Latin-American coun-
tries by being taught to read, write and speak Spanish and Portuguese,
with emphasis on colloquial and business terminology. Other concerns
give their American employees intensive language courses on the scene
of their future activities before allowing them to begin.

Other business firms which have made a careful survey of the field
of languages and trade have discovered that French is not only the
language of fifty million Frenchmen, Belgians, Swiss and Haitians,
but gives access to colonial populations numbering over eighty million,
as well as to the wealthier and more cultured classes of Europe, Asia,
Egypt and Latin America. They have found out that Dutch is the
language of some nine million Hollanders, but also the official tongue
in countries numbering over seventy-five million; that for commercial
purposes in South America, Portuguese is as important as Spanish,
since forty-five million South Americans speak Portuguese, and forty-
eight million speak Spanish.

The foreign languages most extensively used for foreign advertising
by American firms are Spanish, Portuguese, French and Swedish, in
that order. Banking firms use Spanish, French, Portuguese, Italian,
Dutch, German, Swedish, Norwegian and Danish. The electrical-
appliance business adds to these Russian and Chinese. Overseas Air-
lines also use Icelandic and Polish, while Pan-American Airways
stewardesses are required to know either Spanish or Portuguese. There
are over four thousand Italian-American export and import houses in
the United States, doing a business worth 660 million dollars a year.
Our New York department stores find it profitable to employ "per-
sonal shoppers" to assist foreign purchasers, and the languages most
used by these linguistic-commercial experts are French, Spanish,
Portuguese, Italian and Russian. New York hotels maintain foreign
departments with clerks speaking French, German and Spanish.

It is not generally recognized to what an extent language is con-
stantly being enriched by trade-terms and trade-names. Some of these
terms more properly belong to the professional jargons and do not
penetrate the everyday language of the multitudes, as is the case with
the "Keno!" used by professional commodity traders to indicate that
corn has reached the limit for one day's decline by exchange rules, or
the "compur," "sonnar," "supermatic," "fresnel," "capacitron," "pan-

atomic," "stereotach" and "chromatoscope" recently introduced into the language by the photographic industry. But many others become generalized, their original connection with a single firm is forgotten, and they come to describe a certain product irrespective of who puts it out. Among materials and garments, for instance, we have had such recent trade additions as "twylon," "leopardine," "dido" and "lumber-jill." Trade names like "vaseline," "cellophane," "kodak," "orangeade," "flit," "jello," "aspirin," "thermos," "percolator" and "dictaphone" have permeated the popular language of America. Some of these popularizations have ludicrous aspects, as when an entire row of children went down in a spelling bee on the very simple word "does," which they insisted on spelling d-u-z.

Other countries have their household trade names, too. Britain's "bovril" for bouillon cubes is of long standing. More recent are Italy's "glabrodont" for false teeth and "acroagonine," a pick-up drug. In Greece, the term "nylon" has been transferred from stockings to anything that is good or desirable, and has become more or less the equivalent of "first-class." Turkey has a household word in *Telgas,* the name of the Turkish public utility concern; *tel* is Turkish for "wire," but serves conveniently for "telegraph" and "telephone," while *gas* is borrowed from the western languages. The Russians have a new popular automobile known by the household trade-mark of *pobyeda* ("victory"), while even the new Dominion of Pakistan has devised a label, "Pakmark," for all its products, which it hopes to popularize among its people.

That foreign languages should enter the composition of trade-names and trade-marks is, of course, inevitable. This happens not only in the case of exotic perfumes and cosmetics, which receive equally exotic names like "Nuit d'Amour" and "Chen-yu," but also in the case of household products like "Bon Ami" (French for "good friend," though you would never guess it from the pronunciation of its radio boosters), "Sozodont" (Greek for "tooth-saver"), "Pepsodent" (half Greek, half Latin, with the meaning of "tooth-digestion") and "Mavis" (Latin for "you prefer").

That our own products, on reaching foreign lands, should receive new names more in accordance with the speakers' mental processes is

likewise to be expected. "Coca-Cola" is rendered in Chinese by characters which literally mean "Make Man Mouth Happy."

Personal names of inventors and manufacturers lead to the enrichment of the language not only as nouns, but even as verbs, as proved by "sanforize" and "simonize." The personal name process is particularly observable in the case of automobiles. Fords, Chryslers, Chevrolets, Buicks, Oldsmobiles are all named after their original designers, while historical characters account for such names as Hudson, Lincoln, Cadillac, De Soto and La Salle, and mythological personages for Mercury and Zephyr.

The use of certain words in trade-marks assumes imposing proportions. "Gold," for instance, has been found to appear in no less than 3,800 such trade-marks, "ideal" in 1,000, "star," "sun" and "imperial" in about 800 each, and "champion" in 600. The recent addition "atomic" appears in such widely separated products as brake fluid, toy guns, lead pencils, washing machines, golf balls and tomatoes. "Easy" is to be found in the following spellings: *eazy, eezi, eazi, ezey, e-z, eezy, ezy, easi, ese* and even *eeez*. Certain suffixes, like *-ex*, are very popular in trade-marks, perhaps because of the "excellent" connotation. "Maltex," "cutex," "kleenex," "windex" are only scattered examples.

The use of trade-name abbreviations has led to what almost amounts to a new language. Not only do we have such terms as C.O.D. and F.O.B., the full form of which no one ever takes the trouble to use, but trade-mark short-cuts like G.M., M.G.M., Socony, Katy, Nabisco, Sunoco permeate the language. Other languages are at least as bad in this matter as is our own. Italy's FIAT stands for "Italian Automobile Factory, Turin," and Russia's Amtorg for "American Trading Corporation." An abbreviation such as "coke" for "Coca-Cola" leads to the displacement of a legitimate word used in a legitimate function. So does "gas" for "gasoline."

Of special interest among business abbreviations are the American "Inc." and the British "Ltd." The American idea is that a firm is "incorporated" into a single legal entity, which has the advantage, among others, that none of its members may be individually sued. The British, on the other hand, achieve the same result, but express it more forthrightly; the liability of any member of the firm or stockholder

is "limited" at law. Long before it was used to denote a stock company, "corporation" had the meaning of a union or guild of artisans and traders constituting practical monopolies in their branches of employment. Such "corporations" existed in thirteenth-century France and lasted until the French Revolution. The word was also used to denote Fascist trade guilds under Mussolini, and the Fascist state itself was sometimes called the "corporative state."

In the Romance languages stock in a concern is translated by the word that means "action" (*action, acción, azione,* etc.), since it authorizes the owner to act. "S.A." ("Society by Actions," share company) is the abbreviation corresponding to our "Inc." or "Ltd." Another Romance-language expression for "corporation" is "anonymous society"; here the "anonymous" means that none of the shareholders' names can be drawn into a lawsuit. Corresponding to English "Co." for "Company" are Spanish *Cía.* (*Compañía*) and French *Cie* (*Compagnie*).

Two of the most curious abbreviations of a commercial nature on record come to us from Spain and Germany. The current Spanish term for "Black Market" is *straperlo,* being a combination of the first syllables of the names Strauss, Pérez and López, originators of a gambling game in which the house always wins. The Germans have devised *Amitöter,* or "American-killer," for a Russian cigarette placed on the Berlin market in competition with American cigarettes, which are used as Black-Market currency. The Russians' own names for their cigarette is *drug,* which means "friend."

The creation of a medium of exchange, whether it be the round, flat stones of certain South Sea islands, the cacao bean of the Aztecs, the shell and bead wampum of the North American Indians, the gold and silver of our own civilization in its earlier stages, or the bank-notes, checks and deposit money of modern times, relies upon symbolism. Language is likewise a form of symbolism, and this creates an intimate link between the two. No greater linguistic symbolism could be exhibited than that which characterizes our monetary terms.

To the Germans, money is "gold" (*Geld* is a variant of *Gold*); to the French (*argent*) and the Scots (*siller*), it is "silver"; to the Italians and Spaniards (*danaro, dinero*), it is an old Roman coin, the *denarius.*

Our own "money" goes back to the French *monnaie* ("coin"), which in turn goes back to a Latin *moneta,* which also gives us "mint." The temple of Juno Moneta was used as a mint for the coining of money in ancient Rome. *Moneta,* however, has the original meaning of "warner" (from *moneo,* "to warn," "to admonish"). Juno had been given this surname because the sacred geese of her temple once gave warning by their cackling to the Romans that the besieging Gauls were trying to scale the walls by surprise.

"Salary" really means "salt-money" and goes back to the Roman custom of paying part of the soldiers' wage in salt, which in turn is an indication of the importance salt had in ancient and medieval life, when it was needed to preserve perishable foods. "Fee," on the other hand, is of Germanic origin, and originally meant "sheep" or "cattle," reminding us that before metallic media of exchange commercial transactions took place in terms of cattle, as they still do today among the African natives.

The term *valuta,* frequently used by the totalitarian regimes of Europe in the sense of "foreign exchange," is of Italian origin, and means "that which has value." *Valuta pregiata,* or "high-value currency," was used by the Italian Fascist regime to denote such currencies as the dollar and the pound sterling, which were worth while obtaining for international exchanges. The term was later appropriated, minus the adjective, by the Nazis and Communists.

Fiat, from the Latin, means "let it be" or "let it be made." Fiat money is money created by the will of the government, without real backing.

The names of coins and currencies almost invariably tell a story of unfolding civilization. The Biblical "talent" of the New Testament (*talanton* in Greek) is both a coin and a measure. The corresponding Hebrew word of the Old Testament (*kikkār*) is a coin, but its earlier meaning is a "loaf"; bread preceded money. Other Biblical coins are the "shekel," sometimes slangily used today, and the "mite" (about one-quarter of a cent, but with a vastly greater purchasing power in those days).

The *drachma* and *mna* were among the popular coins of ancient Greece; the former survives in the druggist's "dram." The Romans had the *nummus,* from which we get "numismatics," the lore of coins,

and the *solidus,* from which we derive "solid" and the Romance words that mean "hire" or "cent" (French *sou,* Italian *soldo,* Spanish *sueldo*). This word, with a French suffix, ultimately gives us "soldier," a man who fights for pay, a hireling or mercenary.

Among Anglo-Saxon coins we find the *sceatta* ("treasure") and the *styca* ("piece"), from the same Germanic root as German *Stück.* The sequin owes its name to the Italian *zecchino,* derived from *zecca* ("mint"), which in turn comes from the Arabic *sikkah* ("die" or "stamp"). The "bezant," a gold coin of the Middle Ages, owes its name to the city of Byzantium, where it was first coined. The "ducat" is named after the Venetian rulers of thirteenth-century Venice, the *Doges* or Dukes (strangely, "ducat" is used in present-day theatrical slang to indicate an admission-ticket). The "florin" is named after Florence, the "city of the flower," whose emblem is a lily.

The "pistole" was a gold coin of France and Spain; its connection with "pistol" (the weapon, which was originally the name of a type of dagger), is doubtful; both may go back to the city of Pistoia in Italy. A "doubloon" was a Spanish double pistole, worth about $16; early Spanish silver doubloons could be clipped into eight equal parts, each called a *real;* this gave rise to the terms "two bits," "four bits." Another name for doubloons, due to their divisibility into eight parts, was "pieces of eight."

A *grivna* was an ancient Russian silver coin, the equivalent of one pound of silver, in which the *Pravda Russkaya,* the medieval law of Russia, decreed that fines should be paid. Forty *grivni* would pay for a man's life or arm, three for a finger, but twelve for a moustache or beard. In this respect, the Russian custom differed little from that of the early Germanic tribes, with their *weregeld* and *launegeld,* compensation-money to be paid after due process of law for taking a man's life.

Piaster and *dinar* are coins used at various times and in various places. The first is from Low Latin *plastra,* "thin sheet of metal," from which we also get the word "plaster"; the latter from *denarius,* which derives its name from *decem,* "ten," because it was worth ten *asses* (not donkeys, but a smaller Roman coin, whose singular form is *as*).

Among our own coins, the nickel is named after the metal of which a comparatively small amount enters its composition. The metal itself

has a longer German name, *Kupfernickel* ("Old Nick's copper"), given by early miners in Saxony to the metal because it was difficult to smelt and work.

The dime is Jefferson's creation. Its name, likewise Jeffersonian, comes from Old French *disme,* which in turn comes from Latin *decima* and means "tenth."

The dollar got its name from the German *Thaler,* short for *Joachimsthaler,* coined from silver mined in Joachimsthal, Bohemia, in 1519. Different values were assigned to the dollar by the various States in 1783, when English pounds, shillings and pence, French *livres tournois, Louis d'or* and pistoles, Portuguese Johannes, or "joes," Dutch ducats, guilders and florins, and even Swedish rix dollars were current. The most plausible account of the origin of the $ sign is that it represents the first and last letters of the Spanish *pesos,* written one over the other.

Spanish has two words for "dollar," beside the borrowed *dólar.* They are *peso* and *duro.* One refers to the weight of a silver dollar, since the original meaning of *peso* is "weight," the other to its consistency (*duro* means "hard," somewhat like the Latin *solidus* at an earlier date). An interesting reflection of western penetration in Japan is given by the two Japanese words for "dollar," *doru* and *dara,* of which the first reflects British, the second American pronunciation.

Among the currencies of modern states, the French, Belgian and Swiss *franc* gets its name from the Germanic invaders of ancient Gaul, the Franks. The Italian *lira* is from Latin *libra* ("pound"). Both the *lira* and the pound sterling were originally one pound of silver. The *rupee* of India comes from a Sanskrit word meaning "silver." Brazil's *cruzeiro* is named for the Southern Cross; Costa Rica's *colón* after Columbus; Panama's *balboa* after the discoverer of the Pacific; Guatemala's *quetzal* after the ancient Mayan god; Peru's *sol* after the sun; Paraguay's *guaraní* after the predominant Indian tribe of the country; the *sucre* of Ecuador after one of the leaders in South America's wars of independence from Spain.

The Russian ruble comes from the root of "to cut," and the Russian kopek, or, more precisely *kopeika,* from the root of "to save." The Japanese unit of currency is the *yen,* which literally means "circle"; this word was chosen because money is something that should go

around in a circle, or circulate. The Japanese *sen,* on the other hand, was chosen because of similarity in sound to the English "cent."

The Haitian monetary unit is called *gourde.* It was inaugurated by Christophe, the Haitian dictator, who cornered all the gourds, which were used for a variety of purposes by all Haitians, and valued them at 20 sous apiece.

Monetary terms often get into the language when you least expect them. When you "don't give a rap" for something, you are referring to an Irish counterfeit halfpenny of the early eighteenth century, which was called "rap." When you "don't give a dam," you are not swearing, but referring to a small coin of India. Not "giving a continental" is, of course, a reference to one of our own early monetary units.

Rio de Janeiro's street-cars are known as *bondes,* which properly means "bonds." A British company founded the Rio street-car system some sixty-five years ago and issued bonds to finance the enterprise, but the Brazilian public, not accustomed to bonds, thought that was the name for the street-cars, and has been calling them "bonds" ever since.

As old as or older than monetary terms are the weights and measures which permit trade to be carried on systematically. Shekel and talent were originally not monetary units, but units of weight.

Many measures owe their names to parts of the body. "Foot" is obvious. In many languages the equivalent of the "inch" is the "thumb." A "cubit" is an elbow, as is also an "ell." "Palm," "arm" and "hand" are used in many countries as units of measure. So is "digit," which is originally "finger." These words change their form according to the language in which they appear. They also do not by any means designate the same amount of length or width in the various tongues.

The names of ancient Egyptian and Akkadian units of length and weight have come down to us. Among them seems to be the "parasang," in which the Greek author of the *Anabasis* measures his distances. From ancient Persian names of units of length we cull *bāzu,* which is definitely an "arm." One ancient Greek unit of length is the *stadion,* from which we get our "stadium." The "league" as a measure of distance comes down from the ancient Gauls, who called it *leuca* or *leuga.* "Mile" comes from the Latin *mille passuum* ("a thousand

paces"). The Latin *uncia* gives rise both to our unit of length, the "inch," and to our unit of weight, the "ounce." The original meaning of *uncia* is "one-twelfth," of either a pound or a foot. "Carat," the name of the weight unit for jewels, comes from the name of the Mediterranean carob tree, the seeds of which are of very uniform weight, and were used in ancient times as units of weight.

France, which today is proud of having conferred the metric system upon the world, had the most complicated assortment of weights and measures before the French Revolution. Many of them, like the *arpent* and the *aune,* went back to the ancient Gauls. While the entire terminology of the metric system (*meter, kilometer, liter, gram,* etc.) is taken from the Greek, it actually came into being only with the Revolution, in 1793. It has been estimated that many customers and dollars are lost each year by American exporters because they insist on doing business in "bushels," "feet" and "gallons" instead of using the metric system, which is generally in use throughout the non-English-speaking world.

Many foreign countries also have obsolete or obsolescent measures, some of which have linguistic interest. Prussia and Denmark once used the *morgen* (literally "morning") as a unit of area, while Germany, Austria and Switzerland used the *Stunde* ("hour") as a unit of distance varying from two to four miles, an hour's walk. The Russian *pud,* which looks somewhat like our "pound," actually represents about 36 pounds. The "seidel" out of which we drink our beer is originally an Austrian liquid measure, something over half a pint.

Among linguistic curios in the field of measures we have the word "quota," which comes from the Latin *quot,* meaning "how many?" The smallest unit of time is the *sigma,* and the smallest unit of space the *micron;* they are symbolized, respectively, by the Greek letters *sigma* and *mu.* "Avoirdupois," the term used for measuring weight, comes from the French, and literally means "to have some weight."

Certain time divisions (years, 28-day months, days and nights) are based on natural phenomena. Others (centuries, 30- and 31-day months, weeks, hours, minutes, seconds) are man-made, and may be supposed to have been originally connected with various forms of human activity, particularly of a ritualistic or commercial nature. There is no escaping

the fact, however, that both natural and artificial divisions of time became so completely intertwined at a very early period that the distinction between the two departed from the speakers' consciousness before the dawn of civilized records. The Greek *hora,* from which our "hour" is derived, originally meant "season," and probably comes from the same root as our "year."

Among people of Mongolian stock, months, days, and years are named in accordance with a cycle of twelve animals, rat, bull, tiger, hare, dragon, serpent, horse, goat, ape, cock, dog and pig. This gives you "the day of the bull in the month of the dragon in the year of the fire-tiger."

The Roman *Kalendae,* or Calends (from which "calendar" is derived) were the first of the month. The Greeks, who reckoned time differently, had no calends; therefore, "to put off until the Greek Calends" means to put off indefinitely. The Roman Ides (from the verb *iduare,* "to divide") came at the middle of the month, on the thirteenth or fifteenth day. The Nones were the ninth day before the Ides. In reckoning dates, the Romans would count forward to the next Calends, Ides, or Nones. January twenty-eighth would be to them "the fourth day before the Calends of February," since they counted in both the day on which they started and the day on which they finished.

The names of the months cast a good deal of light upon the history of civilization. January is named after Janus, the Roman two-faced god who protected doorways and faced in two directions at once; his name is appropriate for a month which looks back on the old year and forward into the new. February takes its name from the feast of Februa, or purification, which the Romans held in that month. March, May and June are named after Mars, Maja and Juno. July and August, however, desert mythology and take the names of historical characters, Julius Caesar and Augustus, the first Roman emperor. The last four months have simply a numerical significance ("seventh," "eighth," "ninth," "tenth"), but they reveal that the Romans at the very outset of their historical career began their year in March, not in January.

Russian has borrowed the names of the months from the west, and has *Yanvar, Febral',* etc.; but Czech still uses the pagan Slavic names:

Leden ("icy") for January; *Květen* ("blossom") for May; *Srpen* ("sickle") for August; *Listopad* ("leaf-falling") for November, etc.

Hawaiian has borrowed the names of the months from English; but since Hawaiian finds it difficult to pronounce many English sounds, this is the way they appear: *Ianuali, Pepeluali, Malaki, Apelila, Mei, Iune, Iulae, Aukake, Kemakemapa, Okakopa, Nowemapa, Kekemapa.*

For six of the seven days of the week, Latin and the languages descended from it have the following names: Day of the Moon, Day of Mars, Day of Mercury, Day of Jupiter, Day of Venus, Day of Saturn. The last day, however, is replaced in the modern languages by the Hebrew Sabbath, which in its original Akkadian form (*shabattu*) meant "day of rest of the heart." Sunday in Latin was the Day of the Sun, but in the Romance languages it has become the Day of the Lord, from religious Latin *dies dominica.* The Germanic languages have a similar arrangement, with Teutonic gods and goddesses (Wotan, Thor, Freia, etc.) replacing the Roman Olympus. They still retain the sun-worship implied in "Sunday," *Sonntag,* etc., which the Romance languages have discarded. Portuguese, an exception among the Romance languages, uses "second day" for Monday, "third day" for Tuesday, etc. Our English system is obviously a combination of the Roman and the Teutonic week.

Economic relations depend on numerals to a greater extent perhaps than on any other factor. It therefore does not surprise linguists to find that numerals are among the oldest and best-defined words indicating connections among the languages of a given family. A word indicative of a given numeral (say "four," or "ten," or "hundred") can usually be traced without difficulty through all or most of the languages of a given group. It is as little subject to borrowing as are names of family relationship.

In the Indo-European tongues, a word like "seven" assumes the form *septem* in Latin, *sieben* in German, *sedm'* in Slavic, *seacht* in Irish, *hepta* in Greek, *haft* in Persian, *sat* in Hindustani. Among the far-flung languages of the Malayo-Polynesian group, "seven" is *fitu* in the Malagasy of Madagascar, *pitu* in Sumatra, *fitu* in Samoa, *witu* among the Maori of New Zealand, *hitu* in Tahiti, *hiku* in Hawaii.

Similarities of this sort leave little doubt about the affiliations of a language.

Occasionally, we get a surprise. Basque, spoken in the Pyrenees, is totally unrelated to its Indo-European, Romance neighbors, French and Spanish. As we run through the Basque numerals up to five, we find words that prove this lack of kinship: *bat, bi, hirur, laur, bortz.* Then, at six, we get an unexpected *sei,* obviously borrowed from Spanish *seis.* Slavic Bulgarian has a Greek word, *khiliada,* for "thousand." Ural-Altaic Finnish and Romance Rumanian have both borrowed the Slavic form for "hundred." Why were these numerals singled out for borrowing? In the case of the hundreds and the thousands, it may be claimed that the concept of large numbers is a late one, and therefore more likely to be borrowed from people enjoying a higher cultural level. But Basque *sei* must remain among the unsolved riddles of language.

A partial clue is perhaps offered by other phenomena which are of a striking nature. In the language of the Andaman Islands, there are numerals only for one and two. Further numerals up to nine are indicated by raising the required number of fingers, ten by showing both hands with the word "all." No counting is possible beyond ten. Some Australian languages cannot count beyond three; they render "seven" by "pair-pair-pair-one." The Mundurucu Indians of Brazil cannot count beyond five.

All this would seen to indicate that the numerical concept was far from being, at the outset of civilization, the apparently universal thing it is today. Primitive groups develop their numerals with pain and labor. Many of the numerical concepts which to us are clear and fundamental are to them extremely indefinite. Under the circumstances, it is no wonder that relatively high numerals like a hundred and a thousand could have been borrowed at a time when much of the counting was done on finger-tips, and even low numerals, like six, could be borrowed when numerical concepts were still vague.

A similar state of partial confusion is revealed by the form taken by such numerals as eighty in Celtic, French, and even the Ainu of Japanese Hokkaido, "four-twenties." French carries it further by having "sixty-ten" for "seventy." Forms like "two-from-twenty" "one-from-twenty" in Latin, and even the "one-and-twenty," "two-and-

twenty" which were normal in older English and are still normal in German, or the "four-on-ten" of Russian and Rumanian indicate that insofar as there are basic numerals, they are not likely to reach much beyond ten, the figure that can be counted on the fingers of both hands.

The graphic representation of numerals bears this out. In a system of written numerals like the Roman, the figures, I, II, III and the earlier IIII stand for an equivalent number of fingers. The numeral V is originally the palm of the hand, with five fingers outstretched, but the three middle ones omitted for the purposes of rapid writing. X stands for two palms, base to base. Our Indo-European forebears, as can be seen, were not too far removed from the savages of the Andaman Islands.

Of interest in the present-day usage of numerals is the conveying of an indefinite concept by assigning to it a specific number value. Italian says "I am going to take two steps" for "I am going to take a little walk," or "There were four cats there" for "There were very few people." We speak of "forty winks" for a short nap. In the Middle East "forty" is a sign of indefinite value, as indicated by the "forty petals" of Greek for a rose, the "forty thieves" of Ali Baba, and the "forty days" and "forty years" of the Bible.

A modern outgrowth of our somewhat monstrous civilization is the development of such figures as "million," "trillion," "quadrillion," etc. They represent astronomical concepts which the human mind, at its present stage of development, is still partly incapable of grasping. A proposal to ban the word "billion" was recently made in Congress, on the ground that it is confusing, since some people get "million" and "billion" mixed, that in England "billion" is a "million million," and that people do not get a clear conception of the enormous amount involved. The substitute recommended was "thousand million" for our usage.

The latest addition to our series of complex numerals is "Googol," the figure 1 followed by 100 ciphers. The name was imparted by the very young nephew of a famous mathematician, who had run out of -illions and sought inspiration from the mouth of a babe. The process may not be too unlike those which have given us all our other numerals.

Language and Political Institutions

*Whatever was required to be done, the Circumlocution Office was
beforehand with all the public departments in the art of perceiving—
how not to do it.*—Dickens, *Little Dorrit*

As mankind began to emerge out of primeval darkness, the need for
social order began to make itself felt. The individualistic anarchy that
had previously prevailed could not be allowed to continue, under pen-
alty of forfeiting progress.

Man's earliest political institutions were interwoven with the patri-
archal family system, on the one hand, with religion, on the other.
The *pater familias* was at the same time the officiating high priest of
the religious cult and the headman of the clan. It was only by a
series of long, often painful steps that the three functions became dif-
ferentiated. As this process unfolded, political institutions and termi-
nology began to develop.

The family, the clan, the tribe and the nation differ only in degree.
Within the earliest social grouping, fatherhood is implicit in rulership,
as indicated by the term "patriarch," whose modern reflections appear
in Tsarist Russia's "Little Father," India's *bapuji,* applied to Gandhi,
and our own "Father of His Country" and "Great White Father." The
father, or the member of the community to whom others look up as a
father, rules, directs, regulates. In all these words is contained the root
of "kingship," one of the most widespread in the Indo-European tongues,
which appears in the Sanskrit *rajah,* the Latin *rex,* the Celtic *-rix* of
Vercingetorix and Dumnorix, the German *Reich.* Other early political
roots are the Greek *archon* ("chief") of "oligarchy," "autarchy" and
"patriarch," and the Greek *krates* ("power") of "theocracy," "plutoc-
racy," "democracy."

The vocabulary of rulership is as varied as the institution itself. As political institutions change, there is a wholesale shift of words; yet through the kaleidoscopic display, we are somehow always reminded that *plus ça change, plus c'est la même chose.* The *rex* or ruler gives way to the republican *consul,* or "advisor," and he in turn to the *imperator* or "commander." Later come the Venetian *doge* ("leader") and the Florentine *podestà* ("power"); still later come the *Duce* and the *Führer* (also "leaders"). Their lieutenants are patricians, *equites* ("horsemen," men on horseback), barons ("heroes," he-men), counts (*comites,* or "companions" of the ruler), dukes (from the same "leader" root as *Doge* and *Duce*). In Germanic countries they are thanes, earls and knights, *Fürsts* and *Herzogs,* in Slavic lands *atamans* and *boyars,* in Japan *sho-guns* and *taikuns, daimyos* and *samurai,* in Arabic countries *al-qadis* and *al-wazirs.* Their least common denominator is force.

The true art of politics, based upon the consent of the governed rather than the will of rulers, properly begins, as the word indicates, with the Greek *polis* (or "city-state"). One characteristic of true political institutions as distinguished from earlier government by brute force or traditional authority is the existence of some sort of assemblage in some measure representative of the people and their currents of thought. It is here, perhaps, that mankind has exercised its politico-linguistic genius to the best advantage. The Roman *senatus* was in origin an assemblage of older and more experienced men, as the name implies (the root is *senex,* "old man"). The Greek *gerousia* is precisely the same thing. "Diet" as the name of a legislative assembly comes from the Greek *diaita* ("manner of living"), seemingly crossed with Latin *dies* ("day"). The German *Reichstag* and the Danish *riksdag* also bring in the idea of "day," since they both mean "nation's day." Other Scandinavian assemblies are called *thing,* which is the same word as the English "thing," whose original meaning was "cause" or "judicial assembly." The Russian legislative assembly under the Tsars was called the *Duma,* which is the Russian word for "thought," and was possibly meant to imply that legislators should use their heads.

The real essence of democratic politics is the tolerated presence of an opposition, the existence of parties advocating different principles or

methods of government. It was in the Greek city-states, Republican Rome, and the free cities of medieval Europe that political activities and the language of politics, in the modern sense of the word, began. Here also is where the interaction of language and politics is most fully displayed, for while politics contributes to language a complete terminology of its field, language reacts by becoming the standard-bearer and slogan-spreader of political ideals. Such words as "president," "legislature," "session," "motion," "amendment" have their history (most of them originated with the French Revolution), but are relatively colorless. But expressions like "obscurantist," "Fascistization," "Lebensraum," "Herrenvolk," "Bolshevik," "gerrymander," "New Deal," "Dixiecrat," "filibuster," "white supremacy," "people's democracy" are replete with semantic and emotional force. Wise political leaders know not only how to coin them, but also how to exploit them. Language has hidden powers to stimulate political action, as proved by such slogans as, "Workers of the world, unite! You have nothing to lose but your chains!" or Mussolini's *"A chi l'Italia? A noi!"* ("To whom does Italy belong? To us!") or Hitler's *"Ein Reich, ein Volk, ein Führer!"* ("One nation, one people, one leader!") which was perhaps plagiarized from the motto of the French Vendean counter-revolutionists of the late eighteenth century, *"Une foi, une loi, un roi!"* ("One faith, one law, one king!")

Of all historical movements, the French Revolution was probably the most productive in political catchwords, but the Russian revolutionary leaders were steeped in the lore of the earlier upheaval, and they used its terminology abundantly. "Counter-revolution," "reaction," "speculation," "ship of state," "deviation" are terms common to both revolutions. The excessive use of certain prefixes, such as *ultra-, anti-, archi-, de-* and *ex-,* was characteristic of both French and Russian revolutionary writers. The Russians go so far as to speak of the "ex-letters of the alphabet," those letters which were discarded by the Soviet reform of Russian spelling.

It frequently happens that disparaging political terms backfire and come to be adopted and sloganized by their intended butts. When Louis XIV was still a minor, the parliamentary faction opposed to Cardinal Mazarin's regency was accused by one of the Cardinal's followers of behaving like little boys with slings, who fling their stones at

passers-by but run when a police officer appears. The simile was picked up by its victims and hurled back into the teeth of the Mazarin faction in the form of the Frondist movement (*fronde* is the French word for "sling"). A few decades later, the term *sansculottes* ("breechless") was derisively coined by the French nobility to describe the revolutionary rabble, who wore long pants instead of the tight breeches characteristic of the aristocrats; the term met with an enthusiastic reception by its recipients, and was duly sloganized. So was *descamisados* ("shirtless ones") in certain Spanish-speaking countries (Evita Perón addresses her husband's followers as "My shirtless ones"). In the course of our own political history, the term "loco-foco," previously used of a self-igniting match, was disparagingly applied to the Equal Rights party of 1835, which almost rode to power on it. Shortly before the Second World War, *Camelots du roi* ("king's street-hawkers") was scornfully applied to the French royalists and gratefully accepted by them. "The political catchword," says a specialist, "must have on the one hand a matter-of-fact basis, on the other an appeal to the imagination and, above all, to the ear; for nine out of ten people, faced with a choice between rhyme and reason, will prefer rhyme." If the right catchword for your movement happens to be supplied by the opposition, so much the better!

In addition to deliberate semantic reversals, the language of politics has others which are at least in part accidental. Our original Republican party turned into a Democratic party in 1835, then found itself opposed in 1854 by a new Republican party which had borrowed its former name. "Communism," "Socialism" and "Nihilism" were all terms that arose during the French Revolution, but with other meanings. A Communist was at first defined as "a partisan of the sharing of the public wealth," while the Socialists were described as the "allies of the Royalists"; as for a Nihilist, he was "a profiteer who believes in nothing," or a "man who had been despoiled by the *Sansculottes* and has nothing."

The use of other languages than the national one in partisan politics is a phenomenon of rare occurrence save in countries like our own, where the foreign element is numerous. A political adage holds that a successful New York mayor must, among other things, be able to say "hello" in eight languages. La Guardia could do even better, making

acceptable speeches in French, Spanish, Yiddish, Italian and Serbo-Croatian, while O'Dwyer is a fluent speaker of Spanish, which he learned in his younger days when he was studying for the priesthood in Salamanca. In a Connecticut campaign, one candidate of Italian ancestry who could speak no Italian found himself hard pressed by his rival, the scion of an old Massachusetts Bay family, who made campaign speeches to the Italian-born voters in flawless and fluent Italian.

Chief among the seeming outgrowths of present-day political activity, but actually antedating it by centuries, is the law, that body of conventions whereby men are governed or govern themselves. The language of the law is frequently referred to (often in disparaging fashion), but the interplay of law and language is seldom noticed.

The oldest legal code, antedating that of Hammurabi by at least one and a half centuries, was very recently brought to light in Iraq. Its language is Sumerian, its script cuneiform. The king who promulgated it was Lipit-Ishtar, and its provisions do not differ too widely from those of our present-day legal codes. The language of the law vies in antiquity with that of religion, with which it is often inextricably intermingled.

It is, of course, generally known that while our legal institutions go back to the days of the Anglo-Saxons, our legal terminology is almost evenly divided between Latin and Norman-French. Expressions beginning with *sub, per* and *pro* (*sub judice, subpoena, per capita, per se, pro forma, pro tempore*), our writs of *certiorari, mandamus, habeas corpus* and *venire* (the last with its hybrid derivative *veniremen,* men who are summoned to "come" and serve as jurors), expressions like *sine die, bona fide, prima facie, nolo contendere,* even words that have become quite popular, like *alias* and *alibi,* are pure Latin. So is *Cui bono?* ("To whose advantage?") which antedates "whodunit" as a detective story expression and is more definite, in that it seeks to fasten the crime on the character to whom the crime brings some definite advantage. The Latin origin of much of our legal-political terminology was humorously brought forth at a meeting of the London County Council not too long ago. One member complained of an increasing tendency on the part of his colleagues to use "Latin and other foreign expressions." Another replied with a straight face that he would examine the matter *de novo,* that it was a *sine qua non* that reports

should be intelligible, but that every Latin expression was not *ipso facto* unintelligible, since many such expressions could be used *pari passu* with English equivalents. The complaining member then replied: "Will you, *inter alia,* form an *ad hoc* committee, or would this be *ultra vires?*"

The Norman-French portion of our legal language includes such terms as change of "venue," court of "oyer" and "terminer," "escheat" and "escrow," "grand" and "petty jury," "mayhem" (from which the more popular "maim" is derived). "Digamy" and "bigamy" are among the few Greek terms used at law (the first means remarriage after the death of a spouse or a legal divorce).

The action of the law upon language is well illustrated by the fortunes of the Latin suffix *-aticum,* which under the Frankish Merovingian kings was especially applied to describe forms of taxation (*pontaticum,* a bridge toll; *portaticum,* a harbor or transportation tax; even *rotaticum,* a tax on the wheels of vehicles). This legal suffix in due course of time became the French *-age,* and becoming applied to various activities only remotely or not at all connected with legal taxes, appears today in such words as "message," "voyage," "frontage," "acreage," "coinage," "carnage," "sabotage" and "espionage." The Isle of Sark, being very traditional, still conserves a form of taxation called "poulage," consisting of a chicken for every house-chimney, payable by the householder to the island's *Seigneur* or *Dame.*

The legal documents of the Merovingian period also show a misuse of certain Latin verb-tenses which consists of shifting the tense backward in time: "Let this have been done" for "Let this be done"; "It seemed proper to us to have decreed" instead of "to decree." That this usage has its roots in the well-known legalistic desire to mark something as completed and definitely settled seems beyond doubt. What is surprising is that this usage of the legal tongue should have penetrated the nascent Romance languages to the point where a form that meant "I should have been" in Classical Latin (*fuissem*) means "I should be" in French, Spanish and Italian (*fusse, fuese, fossi*). Italian currently says: *"Credevo che sarebbe venuto,"* "I thought he would have come," for "I thought he would come."

This harrowing precision of the legal language, its ultra-fine distinctions, have frequently been noted. Most people are aware of such

expressions as, "Whereas the party of the first part," and "sums in hand paid," as well as of distinctions like the one between "slander" and "libel" (one circulated by word of mouth, the other in written or printed form). A recent case brought out the legal difference between a "friendly" and a "hostile" fire, the first being one brought into being to serve man, the latter one of accidental or unwanted nature. Another case, in which a testator had left her estate to be divided equally "between" (not "among") her daughter and the seven children of her son, revealed the true nature of the distinction between those two often confused prepositions.

It is no doubt this desire for precision on the part of those who deal with the law that has led to the creation of the linguistic form variously known as "Washington Choctaw," "officialese," and "Gobbledigook." The first term is inexact, because the British, too, are afflicted with a disease which they describe as "The King's Gobbledigook." The motivating principle behind Gobbledigook is "never say in one short word what can be said in three long ones." Samples of this strange lingo are "thirty-six calendar months" for "three years," "in short supply" for "scarce," "operation of considerable magnitude" for "big job," "implement" for "use," "aperture" for "hole." The suffix -ee (as in "draftee," "evacuee," "deportee") is said to one of the distinguishing marks of Gobbledigook. "Directive" and "decontrol" are typical of its coinages.

Opponents of the institution of Gobbledigook have created a retaliatory language, which in part antedates Maury Maverick's official discovery of the offending tongue. "Brain trust" and "boondoggle" are at least contemporaneous with "Gobbledigook," while Mrs. Luce's "globaloney" appeared not too much later. "Do-gooders" is of recent origin, but has a strange foreign counterpart in the name of a much older Italian religious order, *Fate Bene Fratelli* ("Do-Good Brothers"). The 1946 Congressional campaign gave us at least two excellent crossings, "gratifaction" (from "gratification" blended with "satisfaction") and "confuddlement" ("confusion" plus "befuddlement"), along with disparaging terms like "machineocrats" and "retardocrats." All these unfortunately seem to have fallen by the wayside, but the still more recent "Dixiecrats" and "disinflation" appear due to tarry with us a while.

Side by side with the language of national politics, which appears

in separate national editions, there is also what may be described as the universal tongue of international politics, or diplomacy. As so frequently happens in the case of political words, the respectable term "diplomacy" itself has a derogatory origin, having been created out of an earlier French *diplôme,* which means an ancient document of an official nature, something rather musty.

Like our legal language, the tongue of diplomacy is almost evenly divided between Latin and French. The former language gives us *casus belli* (or *foederis*), *ante* and *post bellum, status quo* (which a United Nations wag humorously defines as "the mess we're in"), *modus vivendi, persona grata* or *non grata, de facto* and *de jure,* and at least one expression that has penetrated the general language of the community, "ultimatum." French is responsible for *entente cordiale, acte authentique, aide mémoire, note verbale, fait accompli, raison d'état, coup d'état* (or *de main*), and *démarche,* the last term being various defined as "step," "offer," "suggestion," "proposal," "protest," "remonstrance," "request," "overture," "warning," or "threat." It is perhaps to be noted that while the French terms in our national legal terminology reflect the French language of the time of the Norman Conquest, the international terms are of seventeenth- and eighteenth-century vintage, since it was at that period that French gained its ascendancy as the tongue of international relations. From Italian comes "manifesto," a public declaration, usually by one in authority, sometimes applied to a declaration of war.

The use of languages in international dealings is intimately connected with political history, and is to a large degree a reflection of that history. Whereas down to the end of the sixteenth century international business was generally carried on in Latin, from the seventeenth century on French became the tongue of diplomacy *par excellence.* Lovers of the French language ascribe this fact to the clarity and precision of the tongue (but see *démarche,* above); others to the military and political predominance that France gained in continental Europe during the course of two centuries. It is an interesting fact that while French was the only language used at the Congress of Vienna in 1815, both French and English were used at the Versailles Conference after the First World War, and Spanish, Russian and Chinese were added to the list for UN proceedings. But it is also of interest that

despite the presence of five official languages, directional signs at UN headquarters appear only in English and French. Perhaps the chief merit of UN's multilingualism is to point out the need for a single international medium of linguistic exchange.

National and international politics and the changing fortunes of languages and the nations that speak them are often reflected in postage stamps. The political history of Spain in recent years, for instance, is condensed in that country's postage; Spanish stamps of the monarchy used to bear the inscription *España;* under the Republic, they bore the title *República Española;* under Franco, they are labelled *Estado Español,* to indicate the overweening concept of the totalitarian state.

Egyptian stamps once used to bear, in addition to their Arabic inscription, the French *"Postes Egyptiennes";* now they bear *"Egypt Postage"* instead. Iran, on the other hand, continues to use the French *"Postes Persanes."* Early Japanese stamps bore, in addition to their Japanese inscription, the English *"Imperial Japan Postage."* During the period of intense nationalism that culminated in Pearl Harbor this English label was done away with; now it has reappeared. The Indonesians seek independence from the Dutch, but the few stamps they have issued bear no Malay characters, but only the Dutch *"Repoeblik Indonesia,"* which would seem to indicate that Dutch cultural influences are still quite strong in the young island state.

CHAPTER VII

Language and Superstition

The superstition in which we were brought up never loses its power over us, even after we understand it.—Lessing

Supernatural is the laziest word in the vocabulary of ignorance. Nothing is supernatural, because nothing can transcend the laws of nature.—Louis K. Anspacher

The interaction of superstition and language begins in the dawn of prehistory, with the elemental beliefs and taboos of primitive peoples. Anthropologists have remarked upon the striking similarity, among many and scattered races, of the "taboo" idea, the mixture of prohibition, sacredness, danger and pollution attendant upon the performance of certain acts and the utterance of certain words. This combination is to be noted in such widely diverging families as the Polynesian and Melanesian, with their *tabu* and *tambu,* the Javanese, with their *pantang,* the Dakota Indians of North America, with their *wakan,* the Greeks and Romans with their *hagos* and *sacer.*

In the realm of language, the ritualistic or superstitious taboo involves words that may not be spoken, ideas that may not be expressed save by circumlocution. This leads in turn to the coining of new words and the creation of new ideas, sometimes to a more or less complete change in language.

In many South Sea islands the names of the dead may not be mentioned, and words they have been in the habit of using also become *tabu.* This means word-replacement and, eventually, a new vocabulary.

Among the Zulus of South Africa a wife may not use the words appearing in the names of her in-laws. The result is a series of circumlocutions to replace such words as "bull," "cow," "lion," which often appear in personal names. Ultimately the women of the village find them-

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selves using a language largely consisting of such replacements, while the men, to whom no name is taboo, continue using the original terms. A similar situation appears among the Caribs of South America; the men, when on the war-path, use words which are unknown to the women. In Sierra Leone, on the West African coast, there exists a numerous and powerful secret society of men, the *Purrah,* whose members have developed, along with a ritual, a secret tongue quite unknown to the women.

In ancient Rome, the *flamen dialis* (high priest of Jupiter) was hedged in with linguistic restrictions; he could not touch or name, under penalty of dire consequences to the entire people, such things as a goat, a dog, raw meat, beans or ivy.

The Japanese avoid the use of the verb *kiru* ("to cut") at a party, lest it turn into a brawl, and of the verb *kaeru* ("to return") at a wedding, lest it lead to the "return" of the bride (divorce). They also avoid the word for "four" (*shi*) because another word similarly pronounced means "death." Since Japanese has two sets of numerals, it is easy enough to replace *shi* with *yottsu.*

Spaniards avoid the use of the word *culebra* ("serpent") because of a superstition that if they mention it they will see it appear. Old Italian *colubro* has disappeared from use for the same reason. Naturally enough, other words for "snake" have crept in.

Among the Chinese, it is taboo for a son to use in writing the second character of his father's given name, or for a subject to use the second character of his sovereign's name.

In many ancient religions, knowledge of a man's true name was supposed to give power over that person. Some African tribes believe they can injure an enemy by beating a tree over which his name has been uttered.

The Hebrew prohibition of using the name of Jehovah, or Jahweh, led to its replacement by *Adonai* and *Elohim.* In medieval Hebrew Cabalistic lore, a *ba'al šēm* ("master of the name") was one who knew the secret vowels of the word "Jehovah," which knowledge gave him enormous magical powers. The belief in this case was that the ability to call upon a supernatural being by his true name gave power over that being. Among the ancient Egyptians, the name of a person was believed to be endowed with separate existence.

A change of names is supposed to be attended by a change of personality, and this lies at the root of the new names given those who enter certain monastic orders, as well as Popes on their accession. The Egyptian Pharaohs likewise assumed a "Horus-name" at their coronation.

Variations of the name-theme appear in the attempt to appease the supernatural being by the substitution of similar-sounding words ("egad" for "by God"; "zounds" for "by His wounds"; *parbleu* for *par Dieu*); in the avoidance by the Euphrates Arabs of all words beginning with the first letter of Satan's name; in the use of a euphemistic name for beings that can do harm. The Greeks called the Furies *Eumenides* ("kindly"). The "Good People" and "Little People" of the Celts are another example. It is even supposed that our English "bear" (originally "bruin," "the brown one") came into being to replace a more offensive word that appears in Latin *ursus* ("the harmer," "the bruiser"). Such circumlocutions as "Old Nick," "Old Harry," and proverbs like: "Speak of the devil and you'll see him appear" bear witness to the power believed to lie in names.

Italian developed a remarkable straddle-word in *diamine*, used approximately like English "heck," which is itself a modification of "hell." *Diamine* is a cross between *diavolo* ("devil") and *domine* ("Lord"), calling upon both and neither at the same time.

That the process of name-taboo is still operative is shown by the fact that the name of Mussolini is no longer heard in Italy. When anyone wants to refer to the dead dictator, he uses *quell'omino* ("that little man").

Our own linguistic taboos, created by prudishness, which is a form of social superstition, consist of the "four-letter words," to which others are occasionally added, according to the status of the speaker. "Guts," "stink" and "belly" are frequent additions. "Bloody," the one swear word most Englishmen still shudder at, is said to be a condensation of a medieval "by our Lady," and not at all connected with blood or gore.

Two interesting taboos are reported from the screen world. One, recently removed, is against the use of the word "tuberculosis." The other has to do with the word "dame" referring to a girl, which is still banned by the Production Code. A film originally scheduled to have the title *Dames Don't Talk* had to be changed to *Smart Girls Don't Talk*.

The field of modern euphemisms is, of course, immense. A few stray samples of it are the use of "mortician" for "undertaker," "passing away" for "death," "lubritorium" for "greasing station," "Salisbury steak" for "hamburger," "colored person" for "Negro," "stomach" for "belly." One interesting sample reported from Australia is the use of "home trainee," "home associate" and "home aid" for "servant" or "maid."

The essential characteristic of euphemisms, whether arising from superstition or from other social reasons, is that in due course of time they lose their euphemistic character, assume the full, stark significance and connotations of the original word they have displaced, become taboo, and ultimately have to be replaced by new euphemisms.

The lengths to which languages will go to create euphemisms for "toilet" are amusing. German has *Abort* ("away-place"); French uses an English abbreviation, *W.C.;* Spanish and Italian use words which mean "retreat"; Russian *ubornaya* means "adornment place," as our own "toilet" once did. "Toilet" is itself a euphemism, however, the original meaning of the word being "little cloth."

The Portuguese never refer to cancer by its real name, but replace it with a euphemism, "the little beast, God forbid" (*o bicho, salvo seja*). The name of the devil, which our own not too remote ancestors replaced with "deuce" and "dickens," is in Portuguese replaced by a word similar in sound to *diabo—nabo,* which actually means "turnip."

In addition to the taboos and euphemisms, both of which are essentially founded on superstition, ignorance, prudishness and other ancestral traits which the human race, even in its most civilized segments, has far from given up, languages abound in words whose origin or development may be traced back to superstition.

How widespread in ancient times was the belief that death or injury could be caused simply by looking at a person is indicated by the fact that in Italian "evil eye" contracted into a single word, *malocchio*. The disease referred to in medieval English as "the King's evil" was so called because of the belief that only a king's touch could cure it. Even so harmless a plant-name as "witch-hazel" is based on the belief that the shrub's twigs could be used as divining-rods.

In the case of some words, the connection with an original superstitious belief has become so obscured that only etymologists are aware

of it. "Jovial," "saturnine," "mercurial," "martial," for instance, are in origin superstition-words, based on the belief that people showing those qualities were under the influence of Jupiter, Saturn, Mercury or Mars.

Words whose superstitious origin is easily traced abound in all languages, and English has borrowed most of them. *Poltergeist* and *Walpurgisnacht* come to us from the German. The former, literally a "racketing spirit," is a ghost that produces active physical manifestations, even to the point of killing animals or human beings. The latter is the feast of St. Walpurgis, a female Saint said to have converted the Saxons to Christianity; on this feast, the German superstition has it that the witches hold a spectacular Sabbath.

A ghoul (from the Arabic) is a demon who robs graves and feeds on corpses. Also from the Arabic comes *jinni,* a supernatural being subject to magic control. The word has gotten crossed with Latin *genius* which had, among other meanings, that of "attendant spirit," and the result of the crossing is *genie.*

A vampire (from the Hungarian, but said to have originated in Slavic) is the reanimated body of a dead person that comes back to suck the blood of the living. The vampire legend flourishes in the Balkans.

The werewolf is a man capable of assuming the form of a wolf. The *were* comes from an Anglo-Saxon word akin to Latin *vir* ("man"). The quality of being a werewolf, however, takes its name from the Greek, with the order reversed: "lycanthropy" (*lykos,* "wolf"; *anthropos,* "man"). Italian and French take the "man" part of their expressions for "werewolf" from Germanic, indicating that the legend probably originated in the northern countries. French has *loup garou,* in which *garou* comes from the same source as our *were,* while Italian has *lupo mannaro,* in which the *mannaro* seems to be from the German *Mann* or *Männer.*

In Celtic lore, a banshee is a supernatural visitor who gives warning to a family of an approaching death by means of a loud wail. The name comes from the Gaelic *bean* ("woman") and *sith* ("fairy"). The *leprechaun,* defined as a pigmy sprite that carries money and guards treasures, has a name that comes from the Old Irish *luchorpan* ("small body").

Basajaun (or "lord of the forest") is what the Basques call their boogey-man. *Erensuge* is their mythical seven-headed serpent, and

Ganeko is the night demon who punishes those who work by moonlight.

Incubus and succubus (from the Latin) are demons supposed to lie upon or beneath persons in their sleep. "Nightmare" has the same general idea.

The term "voodoo" is said to come from Vaudois, or Waldensian, in its medieval meaning of "heretic." The Waldensians in the Middle Ages were unjustly accused of practicing black magic. *Damballa-ouedo,* the serpent god, is the chief voodoo deity; the name may be connected with that of a Dahomey serpent-god, Dangh-gbi. Among minor voodoo deities is one called *pié Jupité Tonné,* from the French *père Jupiter tonnant* (father Jupiter the thunderer); this name is taken from Roman mythology. *Papaloi* and *mamaloi* are the priests and priestesses of the voodoo cult.

Candomble is the name of a matriarchal cult current among the Negroes of Brazil. Some of its features have gotten into Brazilian dancing and costumes, and have even reached us. *Ñañigo* is the witchcraft lore of Cuba. From the Far East comes *semangat,* a Javanese expression for the soul or spirit, which is supposed to reside in the hair, nails and liver, and to be possessed by plants as well as animals and human beings. The list of superstition-words is far from exhausted.

One or two superstitious beliefs in connection with language in general reveal the intimate tie between the two. The North American Indians attached a sacred value to the spoken word; a Navajo account of creation begins: "Therefore I must tell the truth. I hold my word tight to my breast." The Chinese attach a similar superstitious value to the written word, to the extent that it is a fairly common practice in China for a written prescription to be stewed in a pot along with the ingredients it prescribes.

It is perhaps incongruous to connect the linguistic habits of the New York subways with ancient Roman superstitions, yet the direct precursor of the "Watch your step!" chanted by the subway guard as you step into the cars is the *"Pede dextro!"* ("Right foot forward!") of Roman slaves stationed at the doors of banqueting-halls. The Romans thought it a bad omen to cross the threshold with the left foot first.

LANGUAGE AND INTOLERANCE

Without reprieve, adjudged to death
For want of well pronouncing shibboleth.
                                    —Milton

We have room but for one Language here and that is the English
language, for we intend to see that the crucible turns our people out
as Americans of American nationality and not as dwellers in a polyglot
boarding-house.—Theodore Roosevelt

Human institutions are as good or as bad as the people who create
and use them. Language, intrinsically useful, may also serve to create
and foster intolerance and hatred, and to diffuse these wretched human
qualities by acting as their vehicle. In the latter capacity, the effective-
ness of language is more subtle and destructive than in the former,
because the intolerance that language serves may be social, religious,
racial and national as well as purely linguistic.

Linguistic intolerance is manifested in the aversion to other lan-
guages than one's own. As a student of linguistic sociology puts it, "To
the naive monoglot, objects and ideas are identical with and inseparable
from the particular words used to describe them in the one language he
knows; hence he is inclined to consider speakers of other languages as
something less than human, or at least foreign and hostile to the
world of his own experience."

Examples of this unhappy state of mind could be multiplied *ad
infinitum.* Beginning with the *barbaroi* (or "babblers") of the ancient
Greeks, a term that included all those who spoke anything but the
Greek tongue, we encounter such far-flung instances as the *Nemets*
("unspeaking," "mute," "dumb") conferred by the Slavs upon their
German neighbors, the appellations "southern barbarians" and "mis-
erable ones" bestowed by the Chinese upon the Miao and Moso tribes

of south China, the name "wild men" given by the Celebes islanders to the Ninchassa whose language they cannot understand.

Conversely, many races bestow upon themselves the name of "persons" or "speakers." The Chanktu of Siberia, the Lo-lo or Ne-su of China, the Tule Indians of Panama, even the Germans, whose *Deutsch* comes from an earlier *tiutisk* ("pertaining to the people"), bear national names which in their own respective languages mean "men," "we men," "persons," "people," while Slovaks and Slovenes have names proudly derived from *slovo* ("word"), which mark them as "speakers," in contradistinction to the Germans, who to them are "mute."

Pride in language is probably the most distinctive mark of national intolerance. A Russian child's history of the late war says in part: "Russians will not tolerate that Russian 'bread' be called *Brot*. We breathe freely if we hear our own language. We write, we think in Russian." How all this is reconciled with the workers' international is a mystery. Perhaps it is merely added proof of something long known, that class hatred and national intolerance can perfectly well live side by side and intermingle, though in theory they should be mutually exclusive.

We are far from being sinless in the matter of linguistic nationalism, which with us ranges all the way from exalted English-speaking Unions to the lowly, "Aw, let 'em speak English!" of G.I.'s confronted with the reality of foreign languages. But we need not feel too ashamed. There is probably no national group on earth that does not deem its language the best, not to say the only possible form of human expression. The French generally consider *le belle langue française* as the only one worthy of serious study. Cultured Italians think their language the only one fit for singing. The Spanish-speaking lands, which relinquished their political unity long ago, are still bound together by a shadowy something of a linguistic nature, very far-fetchedly epitomized by what to us is Columbus Day and to them *El Día de la Raza* ("the day of the race"). Actually, Spanish speakers are of all races under the sun, but they forget racial background in linguistic unity, and have devised the term *Hispano* which means, not "Spanish" (*español*), but pertaining to the great Spanish-speaking group.

The manifestations of linguistic nationalism are almost too numerous to catalogue. There are the linguistic purity movements, usually

initiated by the linguistically uninitiated, but which all too frequently bear linguistic fruit. Iran wants to "purify" the Persian language of Turkish and Arabic words, while Turkey wants to throw out Persian words. German endeavors to replace straight loan-words with loan-translations (*Kurzschrift* for *Stenographie,* forgetting that, if the latter is Greek, the former, despite its strongly Germanic aspect, consists of the originally Latin *curtus* and *scribo*). Italy tries to replace foreign, but naturalized words like *bar* and *garage* with *mescita* and *autorimessa.* Even the Russians have been trying to replace *éclair* and *parfait* with native words.

Then we have the drive on behalf of the national tongue, conducted against local dialects on the one hand and minority languages on the other. Mussolini, in one of his campaigns for national unity, abolished all Italian regional societies, thinking he could thus get the Italians to relinquish their dialects and use the national language instead. He also forced the Italian Touring Club to publish a linguistic map of Europe in which all languages are shown in their proper dialectal varieties except Italian, which appears as one solid block of speakers of a single unified tongue, something which it obviously is not. The Republican Spanish Government permitted the teaching of Catalan and Basque in the schools of those regions, but the Franco Government does not. France, which is usually ultra-liberal in most matters, nevertheless forbids the teaching of Breton in the schools of Brittany; even letters addressed in Breton are returned to the sender by the French postal authorities with the inscription: *"Adresse en breton interdite"* ("Address in Breton forbidden").

This attitude is traditional, and goes back to the wave of nationalism that was a by-product of the French Revolution. In 1790, the first decrees of the French Revolutionary Government were translated into the minority languages of France (Provençal, Breton, Basque, Catalan, German, Italian, etc.), and the use of these languages was encouraged, but later this policy was reversed with the statement: "French will become the universal language, since it is the language of liberty. Meanwhile, let it become the language of all Frenchmen."

At a much earlier date, the rising spirit of nationalism born of the Hundred Years' War is given as a possible reason for the shift from French to English in the official proceedings of the English Parliament.

In 1345 the chronicles of London were still kept in Norman-French, but in 1363 Parliament was opened in English, and the same Parliament immediately proceeded to forbid the use of French in the courts.

The story of linguistic nationalism in Russia is an absorbing one. Under the Tsars, the minority languages (Polish, Lettish, Lithuanian, Finnish, etc.) were mercilessly repressed. Under the Soviets, the opposite has taken place. Stalin has repeatedly urged the encouragement and use of minority languages which extend beyond the Soviet borders, for propaganda purposes in the adjoining countries, following in this matter the precedent of French revolutionary leaders who urged the encouragement of German in Alsace so that the Germans beyond the border could be reached and won over. But wherever the use of such languages threatens to lead to a resurgence of nationalism or irredentism, the offending language is straightway chastised. The Moldavian People's Republic of Bessarabia is forced to write its spoken Rumanian in Cyrillic characters instead of the national Rumanian Latin script, and various Turkic languages of southwest Asia that threatened to lean too far in the direction of Pan-Islamic movements were ordered to shift over from Arabic script to Cyrillic. The Russian language itself is in the process of being Russified, with *mezhdunarodny* replacing *internatsionalny,* one word that might conceivably have been respected because of its universal meaning and use.

Also, there is the pride in the national language *vis-à-vis* other national tongues. This has led Mexico to forbid all advertising and store signs in foreign tongues, especially English. It leads Brazilian business men occasionally to tear up letters innocently addressed to them in Spanish by American correspondents who think "Latin America" and "Spanish America" are synonymous. It even leads the Gaelic Youth Movement of Scotland to forbid the use of English at its summer camps.

But since language is the paramount symbol of nationality it is not surprising that an official prohibition to use a language has often been the prime cause of its survival. Irish Gaelic, Welsh, Catalan, Basque, Breton, Lithuanian, possibly even Polish might have succumbed to the pressure of the dominant language of their respective areas had not linguistic persecution bolstered them up. Our own ill-advised attempt to ban Spanish from the schools of Puerto Rico has probably done

more to make the Puerto Ricans race- and language-conscious than anything else we might have done. The Filipinos, subject for long years to Spanish, then to English influence, have provided in their constitution that these languages shall be replaced as soon as possible by "a common national tongue, based on one of the existing native languages."

Next to flags and languages, it is national anthems and patriotic songs that best serve the purposes of nationalistic intolerance. But it is not a piece of music that conveys intolerant or bloodthirsty sentiments, any more than it is a colored piece of bunting. It is the language of a song that is responsible for whatever hatred may be engendered by it. *"La Marseillaise,"* which speaks of "an impure blood watering our furrows," is in itself a beautiful piece of music. The *"Horst Wessel Lied"* of the Nazis and the *"Giovinezza"* of the Fascists had tunes which were once harmless popular songs. Our own "Star-Spangled Banner," with its screaming shells and bursting rockets, was at one time the British drinking-song "Anacreon in Heaven." In *"Deutschland über Alles"* and "Britannia Rule the Waves" the titles speak for themselves. In contrast to these inflammatory pieces, there are other patriotic songs and anthems, like "America the Beautiful" or Czechoslovakia's "Where Is My Home?," which proclaim merely the beauty and peace of the national fatherland, and are no more the vehicles of intolerance than "I Want to Go Back to Indiana" or "My Old Kentucky Home."

From linguistic intolerance we go by easy stages to national intolerance pure and simple, where language serves merely as a means of expression. But it is a powerful medium, creating entire frames of mind by the use of a few well-placed words, which in themselves often convey no derogatory significance whatsoever. "Polack" and "Bohunk" are fighting words in some parts of the United States. Yet the first is nothing but an approximation, closer than "Pole" or "Polish," to the name the Poles give themselves, while the latter seems to be nothing but a telescoped "Bohemian-Hungarian." Some offensive national appellations are, etymologically, a glorification of their recipients, like "wop," an English corruption of the Neapolitan dialect *guappo* ("tough guy"), which in turn comes from Spanish *guapo* ("brave" or "handsome"). Terms that acquire a disparaging connotation lead to strange euphemisms. The Romance languages try to avoid both "Jew" and

"Hebrew" by having recourse to a third term, in itself neither more nor less legitimate than the other two, "Israelite." In America we wavered for a time between "colored" and "negro," and finally compromised by capitalizing the latter.

National names sometimes give rise to unpleasant secondary meanings. The "Welsh" which is rejected by the Welsh themselves (who prefer their ancient name *Cymri*) has unjustly given rise to the verb "to welsh" on an obligation; "Dutch treat," "Dutch uncle" and "Dutch courage" convey the extremely erroneous impression that the Dutch are ungenerous, overly severe, or addicted to alcohol when battle impends. What we know as a "confidence game" is called in France and Italy "American theft" or "American swindle." The Italians insinuate by the use of a national name that the French originated venereal disease, while the French blame it on the English. The Japanese call the bedbug "Nankin insect," implying that it came to them from the Chinese. In German, "Russian" is synonymous with "barbarous," while "English education" means to the Germans education of the flogging type. These attempts to throw the blame for general human failings on members of other national groups are characteristic of xenophobia, "hatred," or better yet, "fear of foreigners," a word which ought to teach those who practise it a lesson. The Greek *xenos,* while it means a foreigner, also means "friend" or "guest"; the ancient Greeks had the institution of "guest-friendship," whereby two dwellers of different cities would shelter and entertain each other when either went to the other's town.

Racial discrimination, as distinguished from national or religious intolerance, is a relatively modern phenomenon. In the Middle Ages, the Jews were persecuted not as members of an alien racial group, but because they would not accept the Christian Messiah. Converted Jews, like the Marranos of Spain, were closely watched for religious relapses, but were otherwise admitted to the privileges of the Christian community. Slaves in the seething Mediterranean were indifferently black or white (Cervantes was once a galley-slave), and Negroes could rise to high estate in white countries, as evidenced by the story of Othello, the "Moor of Venice." Even national intolerance, as distinguished from mere local antipathy, was not much in evidence. People killed one another enthusiastically and often, by virtue of their being subjects of

different liege lords, or because they were citizens of rival city states like Florence and Pisa, but seldom by reason of the fact that they were Spaniards, Frenchmen, Englishmen or Italians.

It took modern times, with the nationalistic spirit fostered by the French Revolution and Napoleon, to give us true national hatreds. As for racial antipathies founded on a pseudo-scientific basis, they are still more recent. The well-known theory of a superior "Nordic" or "Aryan" race, blond, tall and long-skulled, the members of which, coming down from the region of the Baltic, conquered and intermingled with dark, short, broad-skulled races (called Alpine and Mediterranean), was first advanced in the last century by a Frenchman, Gobineau, and restated at the beginning of this century by an American, Madison Grant. According to these racial theorists, whatever greatness exists in the nations of southern Europe, both ancient and modern, whatever contribution to civilization was made by the Greeks, Romans, Hebrews, medieval Frenchmen and Spaniards and Renaissance Italians, was due solely to the Nordic admixture.

Attempts have frequently been made to link this hypothetical Nordic race with the languages of the Indo-European group. Indo-European, in its original, unknown form was according to this theory the language of the original Nordics. Being the conquering race, they imposed their tongue upon the populations with which they came in contact. Here and there, a group of the subjugated races would escape both the conquerors and their language. Such would be, for instance, the Basques of the Pyrenees, speaking a mysterious tongue totally unrelated to Indo-European French and Spanish, and thought to be a survival of a once much more widespread Iberian language extending over most of southern Europe; or the Dravidian tongues of southern India, the only part of the great peninsula to which the Indo-European conquerors did not penetrate.

The two hypotheses of an Aryan race and an original Indo-European language were later fused together by propagandists desirous of proving, for political purposes, that the nations in which both the Nordic type and the Indo-European language predominate, such as Germany, are worthy of ruling the earth, while nations in which a non-Nordic racial type is combined with a non-Indo-European language are definitely inferior.

This reasoning is utterly fallacious. So-called racial traits such as fairness or swarthiness of skin, color of hair and eyes, even length or broadness of skull, appear in hopelessly mixed proportions in all present-day white races, as is natural when we consider the process of intermingling that occurred in pre-historic and historic times, while language is easily discarded and acquired in the course of one or two generations. There is nothing in the human vocal apparatus that renders individuals more partial to one type of language than to another. A Chinese child brought up in a New York school environment will speak exactly the same brand of English as is spoken around him, and if he does not acquire Chinese at home he finds its later acquisition just as difficult as any white child. American-born Jews or Negroes, given the right kind of environment and education, will not only speak English, but perfect, flawless, cultivated English. American Indians in Mexico, whose ancestral tongues were Nahuatl and Mayan, speak perfect Spanish today.

All this leads us to the conclusion that language is never necessarily an index of race or nationality. Nationality, in turn, does not historically seem to be an index of superiority. It does not suffice for a national group to speak an Indo-European language, which may have been acquired, or to point to certain physical features, which appear in varying degrees in all national groups, to proclaim itself superior. The only superiority that the intelligent man can admit is that which is conferred by individual and national contributions to the world's civilization and progress, and to the general human happiness.

The connection of language with religious intolerance is subtler in nature. Religion normally discriminates between true and false believers, but also leaves the door open for the latter to enter the fold. Hence the distinction between faithful and infidels, elect and reprobates is at most a temporary one. Medieval literature offers interesting examples of certain choice adjectives (*felon,* for instance, from which the legal language derives *felony*) invariably coupled with "pagan," "Jew" or "Saracen." But the authors seem almost ready to remove the offensive qualifier if the "felon" will only recant and accept the true faith. How the language of religious intolerance can penetrate the popular tongue, however, is shown by such words as "patter" and "hoax." The former is an abridgement of "Pater Noster," the Latin version of "Our

Father" in the Lord's Prayer; the latter comes from the lengthier "hocus pocus," whose full form is "hocus pocus filiocus," a parody of the Catholic ceremony of the Mass, in which the priest supposedly pronounces the Latin words *Hoc est Corpus Filii,* "This is the Body of the Son." Other expressions of religious antipathy are illustrated by "Papist," "Scarlet Woman," "black Protestant," the *giaour* ("infidel dog") bestowed by Moslems upon all non-believers in the Koran, the *goy* used by some Jews to describe non-Jews, and the "Judas" and "Christ-killer" applied to Jews in some European countries.

The vocabulary of social intolerance is the vocabulary of class distinction: the "helots" of ancient Sparta, the "plebeians" of Rome, the *eta,* or "outcasts," of modern Japan, the *pariah,* or "untouchables," of India; and, on the other side of the railroad tracks, the Brahmans, the patricians, the *tai kun* or "great leaders" (from which our "tycoon" is derived), the "Four Hundred" of the social register. In nineteenth-century Russia, under the Tsars, Classical scholars were not allowed to use the word *demos* ("people"), or to say that Roman emperors were killed, but only that they "perished," while expressions like "forces of nature" and "movement of minds" were deleted by the censors. But the vocabulary of class intolerance can work both ways, as shown by the terms of opprobrium heaped upon aristocrats, plutocrats, bourgeoisie and even kulaks by French and Russian revolutionary writers, or, to take an example from our own history, by the contemptuous term "codfish aristocracy" bestowed after the American Revolution upon those New England families that showed continued leanings toward the British Crown.

Whether national, racial, religious or social, intolerance, pushed to its logical conclusion, has only one outcome, war, which may be of the national kind, like the wars waged by Louis XIV and Napoleon; of the racial sort, like wars of colonial conquest and the Hitlerian invasions; of the religious variety, like the *Jihad,* or "holy war" of the Moslems and the Crusades of the Christians; or of the class species, like the French and Russian revolutions. In war, language is an important auxiliary. As a rule, the importance of a knowledge of foreign languages is fully realized only in the course of an international conflict, when it becomes vital to understand and be understood by one's enemies and allies. Civilian institutions of learning may discard languages

from their curriculum as unimportant to the fuller life of the individual, but military and naval academies never follow that idiotic lead. During the last war, the importance of foreign languages was so thoroughly demonstrated that the civilian institutions, it is hoped, will never repeat their pre-war errors.

Language, however, is also abundantly used and misused for propaganda purposes, both at home and abroad. When it is deemed expedient to persuade the enemy to surrender, propaganda is blared at him in his own tongue. The "war of nerves" is something of which we have an early example in a Sumerian poem of five thousand years ago, relating how a king, by a series of alternating promises, cajolements and threats, convinced an enemy city that it was best to submit without fighting. It goes on unceasingly today over radio networks and newspaper presses, as well as in chancelleries, always couched in a linguistic medium calculated to bring about the best results. When the fighting starts, language is used to steel resistance, inflame hatred and terrorize the foe. Terms like "fifth column," *Schrecklichkeit, Blitzkrieg, Todeswürdig* and *Todeskandidaten* are coined to inform the enemy of what awaits him if he fights on; other terms like "Hun," *Boche, Luftgangster* are created to arouse the killing spirit. The technique of repetition is used, on the theory that if a lie is convincingly retold often enough it will finally be believed. Semantics is worked to the full, with meaning-charges attached to words much as warheads are attached to blockbusters.

War in turn reacts upon language by giving rise to thousands of terms, descriptive of tactics, like "scorched earth" and "operation"; names of military units like "musketeer," "uhlan," "sepoy," "commando," irregular formations like the *franc-tireurs* of 1870 or the *chetniks,* "partisans" and *maquis* of recent times; names of weapons like "tommygun," "breadbasket," *tachanka, Panzer* and *schnorkel;* slang terms like "booby trap," "to frat," "to souvenir" (or "to liberate"); even proper names like the great Kilroy. Many of war's linguistic creations drop by the wayside, like the "liberty cabbage" that temporarily supplanted "sauerkraut" in the First World War. Others survive, and lead to the vocabulary's permanent enrichment.

The charge may be levelled at language that it serves an evil cause when it acts as an auxiliary to intolerance, discrimination and hatred,

and lends itself to the deadly ends of warfare and bloodshed. But language, like science, is in itself impersonal. Its true social function, like that of the airplane or atomic energy, is to aid man, not destroy him. Language merely enables man to collaborate with his fellow-man. It is man himself who must bear the blame for language's misuse if this exalted function is turned to purposes of violence and destruction.

LANGUAGE AND LITERATURE

Language is as much an art and as sure a refuge as painting or music or literature.—Jane Ellen Harrison

It is unfortunately fashionable in a few linguistic circles to regard literature as something set apart from language, to play up the spoken, popular tongue to the detriment of the written, literary language, and to view as "language" *par excellence* that form of speech which is most out of accord with the literary tradition—colloquialisms, vulgarisms and slang. That this attitude is a reaction against an earlier point of view which regarded literature and its language with undue veneration is beside the point.

Language and literature are fundamentally one. Speech gives rise to writing, granted. But once writing has come into being, the written form begins to affect the spoken tongue, stabilize it, mold it, change it, give it a more esthetically pleasing form, endow it with a richer vocabulary.

Attention has been focused upon the fact that the literary language exerts a restraining, conservative influence upon speech. This is largely true, and to the extent that it is true, is also desirable. Were the spoken language not so restrained, it would change at too rapid a rate. Permanent records of civilization's evolution could be kept only with the greatest of difficulty, while mutual comprehension between different areas and different periods would grow even more complex than it is.

Literature serves primarily an esthetic purpose. If we permit this esthetic purpose to be distorted into a worship of the antique *qua* antique, the fault is our own, and the remark may be added that this

form of traditionalism applies not merely to literature, but also to
philosophy, music, art, even political and economic thought.

On the other hand, what too many of the critics of literature forget
is that literature is linguistically as well as esthetically creative. The
poet is, in accordance with the original Greek *poietes,* a "maker" or
"creator"; an author, from the Latin *auctor,* which goes back to the
verb *augeo* ("to increase"), is an "augmenter" or "producer." The poet
and the writer, in their quest for beauty, devise new literary forms,
which seep down from above into the popular language. The literary
or "learned" expressions that have penetrated the spoken vernacular are
legion.

A careful distinction is made by linguists between words of "popu-
lar" and words of "learned" origin. The theory is that the first existed
at all times in the tongue of the masses, and developed in full accord
with all the tendencies of popular speech, while the latter were the
special prerogative of a small intellectual *élite,* who kept them from
changing their form, or who lifted them bodily at a comparatively late
date out of Latin and Greek lexicons. This is true in part, but only in
part. The earliest documents, literary and otherwise, of every modern
tongue swarm with words which one would have to call learned from
their form, yet their nature and use indicate clearly that these words
were not only understood, but actively used, by the entire population.
Under the circumstances, the distinction between "popular" and
"learned" words loses much of its rigidity.

Again, it is too often forgotten that the use of many words, expres-
sions and clichés has its definitely known origin in a specific work of
literature. This is "poetic" in the etymological sense of the word. Re-
cently, in a financial column describing the state of the stock market,
there appeared, untranslated, a famous line from François Villon:
"Mais où sont les neiges d'antan?" The financial editor, astonishingly,
chose to use a highly poetic expression in a highly prosaic article ad-
dressed to people interested in profits and losses.

"The snows of yesteryear" is only one of many expressions that
have found their way into popular speech. If we were to restrict our-
selves to a single facet of the manifold contribution made by literature
to language, the names of literary characters that have become house-
hold words, with very specific meanings, what a word-list we would

have! Spenser's Braggadocio, Shakespeare's Shylock, Hamlet and Romeo; Dickens' Scrooge; Defoe's Man Friday could perhaps head the list, with Galahad and Lochinvar, Mrs. Malaprop, Pollyanna and Babbitt thrown in for good measure. French has Molière's Tartuffe, used as a synonym for "hypocrite," along with Chantecler and Cyrano, while Rabelaisian and Pantagruelian have spread abroad. Spanish gives us Don Juan and Quixote, from whom we even draw an adjective, "quixotic." In Italy, *Perpetua,* Don Abbondio's servant-maid in Manzoni's *Promessi Sposi,* is synonymous with "serving-woman" in general, and *Figaro,* from *The Barber of Seville,* is a generic term for "barber"; *Pulcinella* and *Arlecchino* (Punch and Harlequin of the *Commedia dell'Arte*) are both used with the derisive meaning of "clown," and anti-Fascist Italians often described Mussolini's antics as *pulcinellate.* It is perhaps not too generally known that "eternal feminine" comes to us from Goethe's *Faust* (*Ewig-Weibliche*), and that the very vulgar American "blood and guts" is a paraphrase of an earlier Bismarckian *Blut und Eisen* ("blood and iron"), which in turn goes back to a literary *Blut und Boden* ("blood and soil").

Literary place-names, too, have become common words. "Olympian," "Utopian," "Eldorado" and "Shangri-la" are not merely imaginary, but literary.

Literary authors have with their very own names given rise to common adjectives. The Maquis de Sade, a French writer of tales of depraved cruelty, is responsible for "sadism" and "sadistic"; L. von Sacher Masoch, an Austrian novelist, for "masochism"; Machiavelli, an Italian writer of political affairs, for "machiavellian."

Classical mythology, which is, after all, a form of literature, has given the language such figures of speech as "a Hercules," "a Venus," "an Adonis." "Herculean," "hermetic," "jovial," "martial," "mercurial," "saturnine," "nemesis," "panic," "protean," "titanic," "volcano" and even the prosaic "vulcanize" are all mythological in origin. From the works of Homer we get "odyssey," "mentor" and "stentorian." Even the ancient Greek philosophical writers survive in popular expressions like "platonic," "epicurean" and "stoic."

"Jeopardy" comes to us from an Old French literary term, *jeu parti,* meaning literally "split game," a poetic composition in which two parties, usually a man and a woman, argue alternately; the outcome of

the discussion is in doubt till the end, whence "to be in jeopardy." "Farce" and "farcical" come from the medieval French literary *comédies farcies,* or "stuffed comedies," the stuffing of which was done with highly spiced ingredients. "Vaudeville" has its origin in Olivier Basselin's fifteenth-century skits presented in the town of Vire, later confused with *ville* ("city"). "Robot" (from Czech *robota,* "work") is a word coined by Karel Capek, a Czech playwright, in his play *RUR. Exposé* and *enquête* are French press terms.

But all this, one may argue, is highfalutin language, consisting of creations of the literary tongue which remain largely in the literary tongue, or at the most reach only the spoken tongue of the more educated classes. Let us then take the reverse of the medal. Why is present-day English becoming more and more monosyllabic? Why are longer words being replaced by shorter ones? Why do we generally use such terms as "drive," "plea," "crash," "probe," "flay," "blast" and "oust" for "offensive," "appeal," "collision," "investigation," "denounce," "attack" and "evict" which were so current in the speech of an earlier generation? Only because of their widespread use in newspaper headlines, which seek to compress concepts into the smallest possible space so that the printed letter may be bigger. "Nazi" for "German," "Red" for "Russian," "Norse" for "Norwegian" are added examples of the same headline tendency to shorter substitutes, even at the expense of precision. Newspapers are the popular literature of our day. It is they who set the pace for the spoken tongue, repeating the creative experience of the more ancient writers with household-term characters like Caspar Milquetoast and John Q. Public.

That established literary forms give rise to official national languages when conditions are favorable is known. Whatever predominance the Tuscan dialect holds in the standard Italian of today is due to the fact that three great literary geniuses, Dante, Petrarch and Boccaccio, were Tuscans. Despite the fact that Italian poetic works of note had previously appeared elsewhere, notably at the court of Frederick II of Sicily, the accident of Tuscan birth and environment of the "Big Three" of Italian literature leads many to this day to make the exaggerated assertion that "Italian" is synonymous with "Tuscan."

In medieval France, the Picard dialect of the north was a literary medium of expression at least as important as the Francien which was

the dialect of the Paris court. Despite Francien's obvious political advantage, the standard French language hesitated for a long time between the two dialects, and many Picard forms have entered standard French (even more have entered standard English, because at the time when French words were pouring into English the conflict between the two great northern French dialects was still in progress).

The international benefits that accrue to a language by reason of literary merits are often considerable. Arabic is indisputably the religious tongue of the Moslem world, but Persian may be said to be its poetic language, by reason of its large and beautiful literary output; for literary purposes, Persian is studied in India, Turkey, Soviet Asia, even in China and Indonesia. The spreading of French as a cultural language, first in the twelfth and thirteenth centuries, later in the seventeenth and eighteenth, was due in part to political and military factors, but also to the imposing literary production of France in those two periods. During the intervening centuries, Italian, a language that had little in the way of political or military backing, exerted a powerful influence over European culture, primarily by reason of its literary qualities. We may admire the Greeks for their philosophy and the Romans for their genius of military and political organization, but it is chiefly for their literature that their languages are still studied today.

One question that directly concerns language and literature is that of the preservation of literary values in translation. Beginning with a certain famous "five-foot shelf," there has been in recent times a vogue of "Great Books" in English translation. That this process has its merits, particularly in the case of works whose thought-content is of greater moment than the form of expression, there is no doubt. Also, in the absolute, it is better to read a literary masterpiece in translation than not to read it at all. On the other hand, it must be candidly and regretfully admitted that very, very seldom are purely literary values, as apart from philosophical or didactic content, brought out to the full in a translation. An English reconstruction of Homer's *Iliad,* Virgil's *Aeneid,* Dante's *Divine Comedy,* Cervantes' *Quixote,* is but a pallid replica of the original. The same, by the way, holds true for Shakespeare, Milton, Poe or Mark Twain in French, Spanish, German or Russian. There is far too much interdependence between a work of pure literature and the linguistic medium in which it is conceived and

couched. Can the resonance of Homer's *polyphloisboio thalasses* be rendered by a mere "of the loud-roaring sea"? Can the image conveyed by Virgil's *nox atra incubat ponto* be duplicated by means of English words? Does English "hell" really translate Dante's *inferno,* and if so, why have we borrowed the Italian word? Conversely, what can French, Italian or German do with: "The quality of mercy is not strain'd"?

The alternative to "Great Books" in translation is long years of constant, patient, even leisurely linguistic study, of the sort to which some of our forefathers were addicted. But time presses today. There are too many things to learn, too many to do, in this modern, practical, utilitarian world. Therefore the "Great Books" come to us in small, predigested doses. Are we enriched or impoverished thereby?

LANGUAGE AND SCIENCE

*Science and art belong to the whole world, and before them vanish
the barriers of nationality.*—Goethe

To say that there is a close interrelation between language and
science because the former is the vehicle of scientific thought and dis-
covery, while the latter makes vast and ever new contributions to lan-
guage seems almost trite. Yet science could make no progress were it
not for the great linguistic medium which enables scientists all over
the world to communicate to one another the findings that result from
their constant research. At the same time, it has been estimated that
fully one half of the vocabulary of all civilized languages consists of
scientific and technical terms, a great many of which are fully interna-
tional.

There is a third field of collaboration between mankind's oldest
communications auxiliary and mankind's comparatively novel achieve-
ment. Science has recently cast a new light upon the nature and func-
tioning of language, at least for what concerns language's mechanical
side, the production, transmission and reception of sound. Inventions
like the telephone, phonograph and radio are the chief devices for the
artificial conveying of the human voice, but scientists, diligently labor-
ing upon those appliances, have come forth with revolutionary dis-
coveries concerning man's own production and reception apparatus. The
Bell Telephone Laboratories have opened their research facilities to
linguistic investigators, and the collaboration of descriptive linguists
and telephone technicians has proved of untold benefit to both. To
mention only one result of this cooperation, there has been devised a
visual language for the deaf, whereby phonetic graphs are flashed on a
screen by the use of the cathode-ray tube, with sounds electrically

resolved into pitch, loudness and time. On the screen, a word like "we" looks like a tree bending in a high wind, slanting to the right; "sure" is like a diving airplane; the sound of laughter resembles a row of feathers. This device is useful in teaching the born deaf to speak, and also gives linguists a perfect insight into various phonetic differences concerning which doubts had previously existed.

The X-ray, laryngoscope and bronchoscope, once used exclusively by physicians for the diagnosing of certain diseases, are now also used by linguists for the purpose of determining exactly how language-sounds are produced by the human vocal apparatus.

Technology has contributed to language not merely a Hindustani typewriter with all the characters of the language, but even a Chinese electro-automatic typewriter-teletype, containing a typeface cylinder on which 5,400 Chinese type-faces are engraved, which is electrically operated by keys; thirty-six numerical keys are divided into four groups, and any Chinese character can be put into printing position by striking one key in each group. Another contribution of technology to the linguistic field is a Braille shorthand machine, enabling the blind to take rapid dictation. A third is the Filene Finlay Translator, consisting of an individual light-weight radio receiving set equipped with earphones and an aerial imbedded in the shoulder-straps, which permits the system of simultaneous translating used at the Nürnberg trials and in some of the UN proceedings. A variant of this appliance is a portable translating machine, only eighteen pounds in weight, devised by a Frenchman for business conversations among persons speaking different languages; as one person speaks, the translator gives a simultaneous translation which is the only thing heard by his interlocutor. The soundscriber, wire and tape recorder and mirrorphone have taken their place side by side with the earlier phonograph record for foreign language instruction and speech correction, and are gradually being adopted by the more progressive schools of language. It is no wonder that linguists look upon scientists and technicians as their most valuable allies, and miss no occasion to express their gratitude for the assistance they receive.

In return, language does all it can to further the advances of science by placing all its semantic resources at science's disposal, for the dissemination of accurate information among both scientists and laymen.

The language of science is truly international, because all languages have unlocked the treasure-chests of their vocabularies to science. Greek, which supplies large segments of our conversational and literary tongue, is also responsible for about half of our total scientific vocabulary, as is appropriate for the tongue of Hippocrates and Galen. Words like "gastrogue" and "plasmagene" in nutrition, "psychosomatic," "cybernetics," "mania" and "phobia" in medical psychology, "plankton" and "hydroponic" in biology, "therapy," "antibiotic," "gerontology" and "periston" in medicine, "erythrosuchus" and "pterodactyl" in paleontology, "hypergolic" in jet propulsion, "isotope" and "betatron" in atomic research, come straight from Greek. "Atom" itself is the Greek *atomos,* or "indivisible," a term first applied by James Dalton, who developed the atomic theory in 1808; that this coinage was a misnomer is indicated by the present state of atomic fission, or "splitting of the unsplittable," but that is of little moment. Generic scientific suffixes come from Greek, like the *-atrics* used to denote a branch of the medical science ("geriatrics," the study of the diseases of old age; "pediatrics," the disease of children), or the *-itis* ("appendicitis") used generally to describe an acute, inflamed condition, or the "-osis" ("acidosis") that usually denotes a more chronic state of affairs.

Latin, the tongue of medieval medicine, is still with us to the extent that *U.S. Pharmacopoeia,* the official American druggists' handbook, lists all drugs under their Latin as well as their English names. The scientific names of plants ("Ranunculus," the Persian buttercup), animals ("Felis leo, fam. Leonidae"), parts of the body ("sternum," "femur," "capillaries") are more often Latin than Greek. Terms like "deflagration" (incomplete explosion), "supersonic" (surpassing the speed of sound), "cumulus" (a type of cloud-formation), "artifact" (an archaeological term denoting what is made by the hand of man), expressions like the medical "post mortem" and the homeopathic *Similia similibus curantur* ("Like is cured with like") are Latin in origin. So are "radio" and "video."

Arabic, the tongue of medieval culture, gives us astronomical terms like "zenith" and "nadir," mathematical words like "algebra" and "cipher," chemical expressions like "alcohol," "alkali," "alchemy" and "chemistry" itself. Modern German offers terms like "ohm" (from the

name of a German physicist) and "graupel," the official scientific
name of the granular snow that is not quite sleet. French gives us
"moraine," "ampere" and its derivatives, "nicotine" (named after Jean
Nicot, French ambassador to Portugal, who first popularized tobacco
in France by sending tobacco seeds to Catherine de Medici). From
Italian we have "influenza," "pellagra," "malaria," and numerous com-
mon nouns and adjectives coined from the names of Italian scientists
("volt," "Fallopian," "Malpighian"). From Japanese come *migozai,*
the name of a drug that improves night vision, and *tsunami,* the scien-
tific name of an ocean wave arising from a submarine earthquake,
often incorrectly called "tidal wave." Chinese contributes "typhoon,"
or "great wind," and even the languages of the West Indian natives
assist science with "hurricane."

Our own native English comes to the fore with "watt" and "farad"
(derived from the names of Watt and Faraday, English physicists),
"chain reaction," "ramjet" and "turbofan," "white sound" (the mixture
of sound-waves of all lengths), "radar" (an abbreviation for "radio de-
tection and ranging"), "teleran" ("television radar air navigation") and
"loran" ("long range aid to navigation").

Linguistic hybrids in the scientific field abound, as witnessed by
"succulometer" (Latin "juice," Greek "measure"), "criminogenetics"
(Latin "crime," Greek "origin"), "dehydrofreezing" (Latin "from,"
Greek "water," English "freezing"), even "drunkmeter"; linguistic
curios equally, like the "monoethanolaminedinitrocyclohexylpheno-
late" which is death to moths, the "pneumonoultramicroscopicsilicovol-
canokoniosis," said to be the longest word in the English language,
which describes an occupational disease of miners and the "humuhu-
munukunukuapuaa," which is the native, but also the scientific
name of the Hawaiian "trigger-fish," a little creature considerably
shorter than its appellation.

As for the use of languages by scientists, several interesting facts
are in evidence. Before the First World War, German was by far the
most widespread scientific tongue, with French a somewhat distant
second and English a remote third. Other languages, notably Dutch,
were in fairly frequent use (Dutch was for a time the only scientific
language to penetrate Japan). The great development of the last three
decades has been the gradual ascent of English and Russian. In 1918

English already accounted for forty-five per cent of all chemical papers published, Russian for less than one per cent; in 1940, English still led with thirty-five per cent, while Russian had risen to fourteen per cent. In 1937, over two hundred chemical journals (7.3 per cent of all such published in the world) were published in the Soviet Union; since then, Russian publications have outstripped both German and French. Japanese scientists, who had traditionally used German as a medical language (Japanese, it seems, lacks the scope to convey the precise meaning of many scientific terms), are now replacing it with English, while in America some teachers of technical subjects suggest that Russian replace German in our high schools and colleges because of the rapid advances made by the Soviet Union in technology. On the other hand, the Bell Laboratories recently reported that of all requests to their technological library for foreign-language publications, sixty per cent are still for German and twenty-five per cent for French, while the Engineering Society Library still places German and French at the head of its translations list. The proceedings of the Fifth International Congress of Pediatrics in New York were carried on simultaneously in English, French, German and Spanish, with Russian excluded. The *Surgery Journal* publishes abstracts of new surgical techniques in French, Spanish, Italian and Russian, though German is still the language in which most medical books now in existence appear. Spanish and Portuguese are becoming increasingly important in the medical field, the former particularly because of the publications of the Mexican Institute of Tropical Diseases, the latter because of extensive research and experimentation conducted in Brazil with anti-toxins for snake and insect bites. *Excerpta Medica,* a leading medical journal published in Holland, appears in English.

Along with this jockeying for position on the part of the leading modern languages, there is an interesting resurgence of ancient ones. At the All-India University of Alwar, modern engineering, medicine and other technological subjects are taught in ancient Sanskrit.

The element of humor is not lacking in the binomium of science and language. Psychiatrists have recently coined the term "momism" to describe that quality of certain mothers which unfits sons for later life. Another of their creations is "onomatomania," the Hollywood creation of names like "Bing" Crosby or "Zasu" Pitts, fashioned after a

sound which brought fame to its maker. Poking fun at the non-professional world, they have devised "apprehendicitis" and "general fearosis of living" to describe certain "diseases" with which they often come in contact. When it comes to the phobias, they have listed over two hundred, all derived from the Greek, ranging all the way from "acrophobia" (fear of heights) to "zoophobia" (fear of animals). Among the more remarkable and unusual ones are "pteronophobia" (fear of being tickled by feathers), "chrematophobia" (fear of money), "treiskaidekaphobia" (fear of the number 13), and "pantophobia" which is not the "fear of pants," but the "fear of everything."

To the scientific and technical worker more than nearly anyone else, linguistic comprehension shorn of linguistic difficulties is important. It is therefore not surprising that scientists and technicians are often to be found in the forefront of the movement in favor of an international language, or at least of some form of simplification of the existing tongues. A group of M.I.T. technologists is busily attempting to revise technological terminology in all languages so that it will be uniform, while a well-known technical translator and lexicographer advocates a course of study in our universities leading to the degree of "Polyglot Technical Lexicographer," a man who will be acquainted not merely with foreign languages, but with the complete technological vocabulary of these tongues.

Quite aside from the movement for the internationalization of scientific terminology, there is at present afoot another, unofficial movement tending toward its simplification. A bacteriologist recounts listening to lectures in which the speaker "mouthed the ten-syllable term 'desoxyribonucleic acid' [a chemical constituent of nuclei cells] from five to twenty-five times," and wonders why it could not be shortened to "dorna," in the same way that "sulfanilamide" was reduced to "sulfa," or "alphnaphthylthiourea," a rat destroyer, was cut down to "antu."

Still another linguistic movement is discernible among scientists, one that is, in a sense, quite the antithesis of the movement toward internationalization of terminology. This consists in giving scientific concepts their short, terse Anglo-Saxon names, wherever these exist, in the place of the lengthier Greek and Latin words. My physician thinks he is impressing me when he tells me I am suffering from "torcicollus"

and that he is going to give me a "febrifuge." He forgets that in my mother-tongue *torcicollo* is the popular term for "stiff neck," and *febbrifugo* means, in the language of the masses, anything that will put fever to flight (aspirin, for instance). But not many of his patients enjoy the advantage of a double linguistic background.

Regardless of the direction which our scientific and technical terminology will ultimately take, toward internationalism, simplification, or even greater nationalism, one thing is certain. Science will continue to enrich language, in the same fashion and to the same extent that it will continue to enrich the daily lives of each and every one of us.

LANGUAGE, EDUCATION AND LITERACY

The pen is the tongue of the mind.—Cervantes

"Understandest thou what thou readest?"
"How can I, except some man should guide me?"—Acts, 8:30-31

Education, the process of training the individual for his environment, consists of a great deal more than language. Yet it is too often forgotten that language is the medium whereby that training is overwhelmingly imparted. Scientific definitions, historical and geographical accounts, sociological and economic descriptions, mathematical principles, manual handicraft directions, all come in linguistic form. Aside from all this, a large percentage of the educational process deals with language itself—the national language as a means of self-expression and understanding, foreign languages as a means of international communication or for cultural values.

The story of foreign-language learning is told elsewhere in this volume. Of primary interest here is the account of the imparting of language as a natural medium of communication with one's fellowman.

The spoken language of the community is normally acquired by the individual, at least in rudimentary fashion and for basic purposes, without the need of deliberate outside intervention. Children pick up language at their mother's knee and improve upon it as they go along by the natural process of observation and imitation of their elders. There is no human community so primitive that it does not possess a spoken tongue. In many illiterate communities a considerable measure of mass culture is achieved by means of oral tradition. It is supposed, though not proved, that extensive literary accounts like those of the *Iliad* and *Odyssey* were transmitted by word of mouth for numerous genera-

tions before they were finally committed to writing. In many countries where illiteracy prevails, there are to be found highly intelligent individuals who achieve oral poetic composition of a relatively high order.

But the arts of civilization demand something more. They require that civilization's records be kept in permanent, accessible form, and that all members of the community, or at least the majority, have access to them. The democratic processes, wherein human beings collaborate in making their own choice of political institutions and leadership, are particularly exacting in this respect. Man as a political animal must have recourse to much and varied information which is available to him only in that incarnate, petrified form of speech called writing. Hence the need for mass literacy becomes imperative. If it goes unheeded, man sinks back quickly into an obsolete and inferior form of civilization.

The history of literacy coincides to a considerable degree with the history of civilization. Great and flourishing civilizations have existed in the past with a minimum of popular literacy, but that was only because the burden of those civilizations was carried on the shoulders of that small fraction of the population which was literate. The illiterates were slaves, serfs, peasants, people who fulfilled in their respective civilizations the functions that are today assigned to machines. As the machine liberated man from these functions, the slaves and serfs became human beings in the full sense of the term; and as human beings they demanded and received human prerogatives, not the least important of which was the right to know how to read and write.

It is far from a coincidence, today as in the past, that the nations that enjoy high standards of literacy also lead in material progress and living standards. These are based upon the full, intelligent collaboration of the entire community, unlike the more aristocratic esthetic and cultural values which are based upon the personal achievement of the individual. It is only when we realize this fact that we begin to reconcile the apparent contradiction of nations like Italy and Spain, whose cultural output has been and is extremely high, but whose living standards and economic progress are relatively low. A Carlo Levi and a Blasco Ibáñez can aristocratically lift themselves far above the environment described in their own works, but Eboli and *La Bodega* remain to drag down the average man. Eventually, they will

drag down the Levis and Ibáñez if the situation is not corrected. Correction consists of social improvement, which is invariably followed by economic improvement. The first and most essential step in social improvement is literacy.

Literacy is at the vanguard of education, which in turn is the spearhead of all social progress. Recognition of this essential fact came late. To our own shame it must be admitted that our American Constitution, an admirable political document in all other respects, makes no mention of the educational process. In this one matter our Founding Fathers failed to display the prescience that characterized most of their thinking. They did not see beyond their own times, and the educational standards of their times were substantially what they had been for tens of centuries before them. The educational process was something left to individual, or at most, to institutional initiative. We do not have precise statistics concerning the literacy of the ancient and medieval empires, but it is surmised that the state of affairs in ancient Greece, the Roman Empire, the realm of Charlemagne, the kingdoms and republics of the Middle Ages and Renaissance did not materially differ from the state of affairs we find toward the end of the eighteenth century, when no more than twenty per cent of the population was literate.

The spreading of literacy and education in the civilized nations of the west is predominantly a nineteenth-century phenomenon. The process is not altogether completed as we approach the middle of the twentieth century, but it is sufficiently advanced to permit us to turn our eyes elsewhere and begin to envisage an entire world of literacy, education and enlightenment.

In our own land, a population that was barely twenty per cent literate at the time of the Revolution was still only forty per cent literate in 1840. Today, we still have some ten million illiterate adults in our midst, almost equally divided among native whites, native Negroes, and foreign-born. In view of the determined, relentless onslaughts that are being made against this surviving citadel of ignorance by national and State governments as well as numerous private agencies, it is to be hoped that by the end of the twentieth century American illiteracy will be a thing of the past.

The present-day literacy average for Europe is eighty-six per cent,

or slightly lower than our own. Among highest-literacy countries (99-100%) are Denmark, Sweden, Switzerland, England, Germany, Austria, Norway and Finland. Low literacy (65% or less) is reported from Spain, Greece, Portugal, Rumania, Yugoslavia, Albania and Malta. Iceland has practically one hundred per cent literacy, an enviable record. Russia was about eighty per cent illiterate under the Tsars. Today, the Soviets claim eighty per cent literacy. Yugoslavia claims to have taught 400,000 of its people how to read and write since the end of the war, and has initiated a program designed to wipe out illiteracy altogether in the 1950's. Italy's experience closely parallels our own. From twenty per cent literacy at the dawn of the nineteenth century, she gradually crept up to fifty-two per cent by 1900, and stands at about eighty per cent today. Just as our own illiteracy is largely concentrated in certain sections, so Italy's illiterates reach forty per cent and over in regions like Sicily, Sardinia, and the heel and toe of the Italian boot.

Illiteracy in Latin America is still more rampant. Puerto Rico, when it first became a part of the United States, had a high level of seventy-seven per cent; today, this has been reduced to less than thirty per cent. Mexico has about forty-eight per cent illiteracy, a reflection of the average national income of $100 a year. The Mexican way of disposing of illiteracy is "each one teach one"; every person between the ages of eighteen and sixty who knows how to read and write is required to take under his wing an illiterate between the ages of six and forty, and instruct him. Brazil's illiteracy reaches the high figure of sixty-five per cent. It is estimated that in Brazil's richest and most populous state, São Paulo, forty per cent of the eleven million inhabitants are illiterate. But Brazil is launching a strenuous campaign to eradicate its illiteracy, with the adoption of the "each one teach one" system of the Mexicans.

The illiteracy of Asia is quite high, although in one country, Japan, fully ninety-nine and one-half per cent of the people are at least partly able to read and write. About three-fourths of Japanese school-time is devoted to learning to read and write, and at the end of six years of schooling most Japanese children know about one thousand characters, in addition to the phonetic symbols, or *kanas,* which were devised in the eighth and ninth centuries by Buddhist priests for the purpose of bringing some measure of literacy within the reach of the lower classes.

This was something that the Chinese intellectuals scorned to do, and China today reaps the harvest of their intellectual snobbishness in the fact that her illiterates number over 360 million, or about seventy per cent of her population. Even this, however, is a marked improvement over the situation that prevailed before the rise of the Nationalist Government, when eighty-five per cent of the Chinese were illiterate. Today in China university students are required to teach children one thousand characters, and the children who receive this instruction are in turn required to impart it to their parents. In Indonesia, the Republican Government claims that since its advent and strenuous literacy campaign the number of literate persons has risen from seven to twelve per cent. India's literacy average is about twelve per cent, or fifty million out of four hundred million. Because of the complicated syllabic scripts of many of the Indian languages, about three-quarters of those attending school relapse into illiteracy soon after they leave, and to combat this phenomenon members of the American Board of Foreign Missions have been busy devising simpler alphabetic scripts for those languages. Burma, Malaya, Thailand and the Philippines do not go beyond thirty per cent literacy, Iran and Iraq fifteen per cent. Turkey, despite the adoption of the Roman alphabet, still has only about twenty per cent literacy, or some three million out of eighteen million Turks.

Africa has by far the lowest literacy averages. Only Algeria, Kenya, Tunisia, Uganda and the Union of South Africa attain the maximun percentages of ten to thirty per cent literacy among their native populations. The percentage of literates is almost negligible in French Equatorial Africa, Gambia and Liberia. Despite this fact, there are in Africa over one hundred newspapers and periodicals published in native languages, with the Swahili of East Africa and the Zulu of South Africa in the lead. A single Nigerian weekly bears articles in English, Ga, Fanti, Ewe, Kru, Ibo, Yoruba, Hausa, Ijaw, Benin, Sobo, Jekri and Efik.

Even the islands of the Far Pacific are making strenuous attempts to end illiteracy. Instruction in the written form of pidgin English is given by missionaries. In a monthly magazine, *Frend Belong Mi,* that has been published for the natives of New Guinea since 1935, everything, including the fiction and cross-word puzzles, is in pidgin.

Just as religion took the lead in conserving and spreading linguistic culture after the fall of the Roman Empire, so today it joins the governments in the great world-wide battle against illiteracy and ignorance. Missionaries have reduced to writing innumerable oral languages of the far corners of the earth. A mere glance at the American Bible Society's "Book of a Thousand Tongues" reveals the marvelous work that has been done by the representatives of the various Christian faiths in creating, perfecting and imparting written forms of primitive languages to their speakers.

Greatest and most famous among contemporary crusaders in this field is the Reverend Frank Laubach, who has devised written forms for dozens upon dozens of Asiatic, African and American languages. His plan for teaching reading to illiterates ignores the alphabet. Sound combinations are visually learned. A written syllable is presented, along with the picture of a familiar object whose name begins with that syllable (the syllable "new" and the picture of a newspaper would be an English example). Eventually the learner can recognize syllables by themselves, and then proceed to form words of more than one syllable.

It is Dr. Laubach's contention that within one hundred years the backward races of the earth will have achieved literacy and be ready to take their places in the world's supreme councils; that if we assist them to gain this equality-bestowing literacy, we shall have earned their friendship and gratitude, but if we try to hold them back we shall only throw them into the arms of the Communists, who in the Soviet Union have made giant strides in creating written forms for their own backward populations and bestowing upon them the gift of literacy.

The picture of the world's struggle against illiteracy and ignorance would be incomplete without a reference to the Braille system, devised by a nineteenth-century Frenchman, Louis Braille, which by a series of dots and dashes perceptible to the touch enables the blind to "read" and "write." The story of the application of the Braille code to the world's various languages is a romance in itself; its latest chapter is the development of a uniform code for the major languages of India, which will permit the blind of that vast area to become literate.

Unlike most of the issues that confront the world today, literacy is one that finds all nations united and anxious to cooperate. The crusade

against ignorance is being waged by the human race as a whole, without any perceptible Iron Curtain to separate the east from the west. If anything, there is a noble, generous rivalry in the struggle to free mankind from the fetters of ignorance which are forged by illiteracy. The aspects of this common campaign inspire the world's educators to hope that despite all the distressing political omens that beset our generation, the torch of enlightenment may yet show the way to a better life for those who will follow us.

The Geography of Language

*Therefore is the name of it called Babel; because the Lord did
there confound the language of all the earth.*—Genesis 11: 9

*The man who knows no foreign language knows nothing of his
mother tongue.*—Goethe

The world's population of about two and a half billion people is
scattered, in very uneven fashion, over practically all of the earth's land
surface. The world's languages are still more unevenly distributed.

It has been estimated that the world's peoples speak 2,796 different
tongues, exclusive of minor dialects, the number of which has never
been satisfactorily determined. If the speakers were equally appor-
tioned among the languages, each language would have nearly one
million speakers.

Obviously, this proportion does not hold. English is spoken by
practically all of the United States' 140 million inhabitants, to which
are added the 75 million speakers of the United Kingdom and Britain's
white Dominions. We have heard of "50 million Frenchmen" (actu-
ally, the number is 42 million) who speak French. There is a
Latin-American world to the south of us, with a population closely
approaching our own total of 140 million, and even if from that total
we subtract the 50 million Portuguese speakers of Brazil, Spanish is
left in linguistic control of some 90 million Western Hemisphere people.
The population of the Soviet Union approaches the 200 million mark;
not all of them speak Russian, but over half of them do. China's

inhabitants are estimated at some 450 million, and nearly all of them use one or another dialect of Chinese.

If some languages have 50, 100, 200 or 450 million speakers, others must have far less than the one million to which the share-and-share-alike plan would entitle them. As a matter of fact, over twelve hundred of our 2,796 languages are spoken by American Indian tribes most of which number only a few thousand or even a few hundred people. Over 500 more are used by African Negro groups, many of which are quite small. Five hundred more belong to the natives of Australia, Tasmania, New Guinea and the islands of the Pacific. Hundreds of others are spoken by small Asiatic groups.

There are in existence only thirteen languages with 50 million or more speakers. They are, in order of numerical importance, Chinese, English, Hindustani, Russian, Spanish, German, Japanese, French, Malay, Bengali, Portuguese, Italian and Arabic. The roughly approximate figures, which include non-native as well as native speakers, are as follows:

Chinese	450,000,000	French	75,000,000
English	250,000,000	Malay	60,000,000
Hindustani	160,000,000	Bengali	60,000,000
Russian	140,000,000	Portuguese	55,000,000
Spanish	110,000,000	Italian	55,000,000
German	100,000,000	Arabic	50,000,000
Japanese	80,000,000		

The distribution of these languages varies widely. Among the Asiatic tongues, Chinese is largely limited to China and Manchuria. Hindustani and Bengali have little currency outside their native India. Japanese is the tongue of the islands of Japan, and enjoys some currency in Korea and near-by sections of the Asiatic mainland. Malay is spoken in the Dutch East Indies and British Malaya, and is understood as far as the Philippines. Arabic enjoys a tremendous sweep of territory, extending across Africa north of the Tropic of Cancer from Casablanca to Cairo and beyond, into Palestine, Syria, Iraq and Arabia, and is widely understood wherever the Moslem religion reaches; but it is almost everywhere mingled with other languages of non-Arabic, though kindred stock (Berber, Kushitic, Hebrew, etc.).

English, as a native or colonial tongue, covers one-fifth of the earth's land surface. It holds almost undisputed sway over the United States, the British Isles, Canada, Australia, New Zealand and portions of South Africa, and is current in all British and American colonies and possessions. There are over 150 million English speakers in the Western Hemisphere; over 50 million in Europe; over 25 million in Asia; over 5 million in Africa; and nearly 10 million in Oceania, including Australia and New Zealand. Five million people on the European continent speak English in addition to their own native tongues.

Russian holds control over one-sixth of the earth's land surface, being the predominant language or, as the Soviets put it, the "binding tongue" of the far-flung Soviet Union. But little more than half of the Union's 200 million inhabitants use Russian as their native tongue. The rest speak 145 different languages, including the Ukrainian of southern Russia, the Georgian of Stalin, and a host of Turkic tongues.

Spanish appears in its Spanish homeland, the Canary Islands and the Spanish colonies, but less than one-fourth of its speakers are located there. The other three-fourths are in the Western Hemisphere, where Spanish is second only to English, covering Mexico, Central America, Cuba, Puerto Rico, the Dominican Republic, and all of South America with the exception of Brazil and the Guianas.

Portuguese is the tongue of Brazil, a country larger than the continental United States, as well as of Portugal and the Portuguese colonies in Africa, Asia and the Pacific. The Azores, Madeira and Cape Verde Islands speak Portuguese.

German is largely restricted to Europe. There it is spoken not only by the populations of Germany, Austria and most of Switzerland, but also by some 20 million continental Europeans in neighboring central European countries—Czechoslovakia, Poland, the Netherlands, Hungary, Yugoslavia, Sweden, etc.

French is the language of France, part of Switzerland and Belgium, the Belgian and French colonial empires (the latter, called by the French *la France d'Outre-mer,* or "Overseas France," has an area several times that of France and a population almost double that of the mother-country), as well as of Haiti and the Province of Quebec in the Western Hemisphere. It is widely used as a cultural tongue in Europe, Asia, Africa and Latin America. Over five million Euro-

peans outside of French-speaking countries speak French in addition to their own tongues.

Italian, the language of Italy and one of the Swiss Cantons, is current in the former Italian colonies (Eritrea, Somaliland, Libya and Cyrenaica), and is used by Italian emigrant groups numbering some ten million, located mostly in various Mediterranean countries, the United States, Argentina, Brazil, Uruguay and Chile.

Germanic languages, including English, German, Dutch and the Scandinavian tongues (Swedish, Norwegian, Danish and Icelandic) number some 325 million speakers. The total for the Romance languages (French, Spanish, Portuguese, Italian, Rumanian) is about 280 million. The Slavic tongues, of which Russian is the most important, run beyond the 200 million mark, with Russian accounting for over 100 million, Polish and Ukrainian for 30 million each, Czech and Slovak for about 12 million, Serbo-Croatian for approximately the same number, and Bulgarian for 8 million.

India's 400 million inhabitants speak thirty-three major tongues, along with a host of minor languages and dialects. Hindustani, with its 160 million, and Bengali, with 60, are the leading languages of India.

The "National Tongue" of China, based on the North Mandarin dialect, is spoken by about two-thirds of China's 450 million. The remainder speak various dialects, like the Cantonese most frequently heard in the United States.

Ural-Altaic is the name given to a group of languages which cover a wide territorial extent in northern and central Asia, but whose speakers do not exceed 60 million. These Asiatic tongues have several spearheads in Europe, Finnish, Hungarian and Turkish among them.

The Malayo-Polynesian languages, of which Malay, one of the leading thirteen, is a sample, range from Madagascar off the east African coast, across the Indian and Pacific oceans, to Easter Island, off the western coast of South America. They embrace Malaya, the Dutch East Indies, the Philippines, the islands of Melanesia, Micronesia and Polynesia, New Zealand and Hawaii, with almost 100 million speakers.

It is a curious fact that Hindustani and Russian, though numerically they rank third and fourth, outstripping German and Spanish, are not the leading languages of their respective continents. Hindustani is

outnumbered by Chinese, the most widely-spoken tongue of Asia, while Russian speakers are divided between Europe and Asia, so that Russian is outnumbered in Europe by German's 100 million speakers, who form a European plurality. English leads in North America and Oceania, Spanish in Central and South America, while Arabic, numerically smallest of the world's thirteen leading languages, nevertheless holds the palm for Africa.

The overwhelming majority of our own population of 140 million speaks English. There are about twenty-two million people here, however, whose mother-tongue is not English. German accounts for some six million, Italian for four, Polish for two and a half, Spanish and Yiddish for two each, French for one and a half, Swedish for one, while Norwegian, Czech and Russian approach the one million mark. Almost one million French speakers, immigrants from Canada, inhabit our New England States; over one million Spanish speakers live in our southwestern States; one-quarter million Portuguese speakers live in California and Massachusetts. The 1940 census, interestingly, showed native Spanish speakers living in every State of the Union but South Dakota, and native Portuguese speakers in every State but North Dakota. It is also of interest that there are in New York City more Italian speakers than in Rome, and more Yiddish speakers than in Palestine.

KING'S ENGLISH AND AMERICAN LANGUAGE

In richness, good sense, and terse convenience, no other of the living languages may be put beside English.—Jakob Grimm

English is the language that has enjoyed by far the fastest growth within recent times; four centuries ago, it was outstripped by French, German, Spanish and Italian; today, it has almost as many speakers as the four put together. After Chinese, English has the world's largest speaking population—some 250 million; or, to put it another way, one person out of every ten in the world. In addition, it gives access to colonial or semi-colonial populations numbering 500 million more. It is the native or official language of countries covering one-fifth of the earth's land surface, outstripping its nearest competitor for area, Russian, by several thousands of square miles, and having the further advantage of being widely distributed over the globe, instead of being concentrated in one land mass.

English is at present the most widely studied language in countries where it is not native, being a compulsory part of the higher educational curriculum of such widely scattered nations as Russia, Japan and Turkey. It is conspicuously the language of trade and business transactions, and bids fair to become a tongue of common intercourse in many parts of the world. Three-fourths of the world's mail is written in English. Over half of the world's newspapers are printed in English. English is the language of over three-fifths of the world's radio stations. It has a literature as flourishing as any, and has recently become one of the leading tongues of international scholarship and scientific research. More than half of the world's scientific and technical periodicals are printed entirely or partly in English.

All these features make modern English a language similar in

scope to the Latin of ancient times—a mighty imperial tongue, and the chief and most formidable contender among the languages aspiring to the honor of becoming the world tongue of the future.

Historically, English belongs to the West Germanic branch of Indo-European, having developed from the Anglo-Saxon of the invaders from the continental North Sea coast who wrested control of Britain from its Romanized Celtic inhabitants in the sixth and seventh centuries of our era. More than nearly any other tongue, however, English has displayed remarkable powers of adaptation and assimilation, absorbing so many and such varied elements of vocabulary and syntax from diverse sources (notably Norman-French, Latin and Greek) that today it would be a definite misstatement to pronounce it a Germanic language pure and simple.

While accepting these large foreign contributions, English has revealed, in the course of its history, astounding capacities for growth from within, the ability to coin, combine, create and simplify to the point where its vocabulary has become the richest on earth and one of the most precise and expressive.

At the same time, English has shown, in common with many other Indo-European languages, but to a greater degree than most, the tendency to evolve from the original Indo-European structure. The latter was highly synthetic, expressing many concepts by means of a single lengthy word consisting of a root and its associated prefixes and suffixes. English, in its historical development, tends toward an analytical state, wherein the same multitude of concepts is expressed by numerous short words, loosely held together by syntactical devices. It is a normal experience for high school students who translate from Latin into English to discover that while their translation usually contains about the same number of lines as the original, the number of words is double that of the Latin passage.

Some linguists choose to view this process as a simplification of the language, something almost deliberately designed to make the language easier to its speakers and learners. That this is not altogether or necessarily true is indicated by the crazy-quilt of verb-and-preposition combinations which have been pointed out elsewhere, expressions like "go through with," "put up with," "get away with," which must be separately learned as idioms and correctly arranged. The difficulties

of our analytical language stand out in full only when one undertakes, as this writer once did, to compose a grammar of English for the use of speakers of a more synthetic tongue. It is then, and only then, that constructions which we have taken for granted all our lives rise to smite us between the eyes, and to convince us that the foreigner who wants to learn to speak English with something more than vaudeville-immigrant correctness and fluency must labor at least as hard and as long as the American student who struggles through lists of French or Spanish conjugational endings.

One of the greatest structural merits of the modern English tongue (though it is not altogether an unmixed blessing) lies in the numerous parts of speech that have become invariable in form. The learner of English is faced with a single form of the definite article (*"the"*) and of the adjective (*"large"*), a double form of the indefinite article (*"a"* or *"an,"* which, however, alternate euphoniously, in accordance with the initial sound of the word that follows, not with the gender of the noun). The distinctions of our demonstrative pronouns apply only to number (*"this," "these"*). Personal, possessive, relative and interrogative pronouns show few complexities of gender, number or case (*"I," "me," "we," "us"; "my," "mine"; "who," "whom"*). The noun has discarded all case-endings save for a genitive (*"boy's"*), and the plural of the noun, with a few exceptions (*"men," "oxen," "children," "feet," "deer,"* etc.) is formed by the addition of an *-s* or *-es*.

At this point, however, we encounter an important stumbling-block. The so-called *-s* of the plural sounds like an *-s* only when it follows unvoiced consonants (*"books," "trips," "goats"*); after voiced consonants, liquids, nasals and vowels it sounds like a *-z* (*"eggs," "ribs," "goads," "tears," "boys"*). Additional complications are offered by special spellings (*"lady," "ladies"*) and by shifts in the consonant of the root (*"loaf," "loaves"*).

The English verb is, at first glance, a mechanism of extreme simplicity. Weak verbs have only four forms (*"love," "loves," "loving," "loved"*); strong verbs have five (*"write," "writes," "wrote," "writing," "written"*). All other verb-forms are produced by combining some of these forms with various personal pronouns (*"I," "you," "he," "they"*) and with auxiliaries (*"has," "had," "am," "was," "shall," "should," "will," "would," "may," "might,"* etc.). This, according to some lin-

guists, is a vast improvement over such synthetic forms as Latin *amabo* ("I shall love") or Spanish *quisieran* ("they might want"). In reality, there are as many possibilities of confusion and error in one system as in the other, nor is memorizing English auxiliaries and their functions easier than memorizing straight verb-forms with endings.

In addition, the same pronunciation difficulties that appear in the plural of nouns also appear in the *-s* and *-ed* forms of verbs. The *-s* is an *-s* only after unvoiced consonants (*"speaks," "wants"*), but becomes a *-z* after voiced consonants, liquids, nasals and vowels (*"bids," "calls," "has," "owes"*). The *-ed* has an *e* which is sometimes pronounced (*"wanted"*), sometimes silent (*"called"*). The *-d* is pronounced like a *-t* after unvoiced consonants (*"laughed," "asked"*). The past of strong verbs is unpredictable, save to Germanic scholars (why *"sing," "sang," "ring," "rang,"* but *"cling," "clung"* and *"bring," "brought"?*). So is the past participle (*"wreak," "wrought,"* but *"speak," "spoken"*). Add to this our use of "do" as an interrogative and negative auxiliary ("does he go?," "he did not go"), which does not apply to the verb "to be," and may or may not apply to the verb "to have" ("has he?," "does he have?"), and it will be seen that the English verb is not so simple as it looks.

It is often remarked that in spite of all these difficulties, foreigners manage to make themselves understood. This, of course, is true of any language. An English speaker using the wrong case of a Russian noun, or the wrong form of a French verb, has as much chance of being understood (and ridiculed) as a Slav who says, "Please, I want not go," or a Frenchman who says, "I am een America seence two weeks."

English spelling, as has been frequently pointed out by G. B. Shaw, Senator Robert Owen and others, is a monument to traditionalism so weird as to be practically incredible. We have only five written vowels, but at least thirteen vowel-sounds, plus some thirty vowel-combinations, or diphthongs, many of which are represented by simple vowels in writing (our so-called "long" vowels, *a, i, o* and *u,* are all phonetically combinations of two vowel-sounds). A group like *ou* appears with a different phonetic value in each of these words: "house," "cough," "cousin," "through," "furlough," "could." Words like "Polish" and "polish" are distinguished in writing only by the capital. Shaw

is said to be responsible for the statement that "fish" could be spelled "ghoti" by using the *gh* of "enough," the *o* of "women" and the *ti* of "nation."

It is conceivable that a foreigner, with the aid of a good grammatical introduction to pronunciation and a few short lessons from a teacher, could learn to speak acceptable Spanish, Italian, Russian, German, Portuguese, even French. This is not true of English, where every word is a law unto itself. There are no English rules of pronunciation, in the same sense that there are Spanish, Italian, German, even French rules. If the learner proceeds from the written to the spoken language, as foreigners usually do, he must learn the pronunciation of each word, separately and painfully. If he begins with the spoken tongue and passes on to the written, as is the case with our own school-children, then he must learn to spell. The process of learning to spell is an endless one, continuing through elementary school, high school and college, and often not quite completed by the time the English-speaking student emerges with a university degree. In this one respect, English is a tongue of infinite difficulty, far harder than any of its kindred Indo-European languages. Indeed, the only comparison possible is with languages like Chinese and Japanese, where the ideogram for each word must be individually learned. Whether we realize it or not (and we are quick to realize it when we hark back to the spelling bees of our school-days), every English word is at least in part an ideogram, with the pronunciation offering some clue, but never a complete key, to the spelling.

Yet despite these glaring disadvantages, English manages to hold all the ground it has gained and to make additional progress. This has been due in large measure to the colonizing habits of English speakers, who have spread their language from the British Isles to the far corners of the earth. Obviously, this tremendous sweep of territory and population could not have been achieved without a considerable degree of dialectalization and the creation of diverging forms of English speech. Linguists often express surprise that the divergences among the various speech-forms of the Anglo-Saxon world are as relatively slight as is actually the case.

The main varieties of English speech (each, of course, subdivided into local sub-varieties) are the British, with its numerous and widely

diverging dialects; the American, with its three main subdivisions (Eastern, Southern and General American); the Canadian, which tends to approach the American; the Australian and New Zealand, which in part coincide; and the South African. In addition, we have numerous pidginized forms of English, in which the influence of one or more other languages is distinctly perceptible.

If we first consider English as it appears today on its original home heath, we find, in addition to the local dialects, which are numerous and varied, a national standard known as the "King's English" which is generally used by the more educated classes of Britain and is spoken by B.B.C. announcers and broadcasters. It is distinguished from American English primarily by its enunciation, which is more clipped, incisive and staccato, and by its greater modulation of tone and rise and fall in pitch.

This *koine* of Britain is not to be confused with the Oxford accent, with which it coincides only in part. The latter is not at all the Oxfordshire dialect, but a cultivated language that grew up around the university and did not become current in England till the beginning of the nineteenth century. Both King's English and Oxford English come closer to cultured Londonese (not Cockney, however) than to any other local English dialect.

Nearly all Britishers approve of the King's English. Oxford English does not meet with such unanimous approval, as witnessed by the description given of it by a Scottish philologist, who calls it "artificial, slovenly, difficult for foreigners to acquire, and inharmonious." It is still less popular abroad; a Russian linguistic congress in 1930 defined Oxford English as "an aristocratic tongue purposely fostered by the highest British governing and land-owning classes in order to maintain their icy and lofty exclusiveness"; at the same congress the charge was made that the swallowing of final sounds characteristic of Oxford English was deliberately designed to make the language difficult for others to speak. It is difficult in an appraisal of this sort to separate what is purely linguistic from what is political, but the fact remains that whenever the speech of Britain comes in for ridicule from American sources, it is invariably the excesses of the Oxford language that supply most of the ammunition.

Differences in pronunciation between British English and American

English are numerous, though nearly all of the British peculiarities have their counterpart in one section or another of the United States. King's English gives a broad *ah*-sound to words like "bath" and "dance," but so do several New England varieties. This pronunciation, incidentally, is a comparatively recent innovation, and is said to have come from a stage affectation originally introduced by the actor David Garrick in the eighteenth century. The "flat" sound of General American "bath," "dance" antedates it. The sound given by most Englishmen to words containing so-called "short *o*" ("pot," "lot") comes close to the French open *o* of *notre,* while the General American sound is more like a shortening of the *a* of "father." Long *o* (as in "bone") is a diphthong in both languages, but in English pronunciation the sound comes close to *ou* of General American "house." Final consonants are far more explosive in British than in American English. The sound of long *i* for long *a* ("lidy" for "lady") and the dropping of initial *h* ("an 'orrible 'eadache") are characteristic of lower-class London Cockney rather than of the King's English.

Differences in the pronunciation of individual words are quite numerous. In a *Dictionary of English Pronunciation with American Variants,* twenty-eight per cent of the words show different pronunciations. The British Army pronounces "lieutenant" *leftenant,* though a pronunciation similar to ours is used for the rank in the British Navy. *Shedule* and *figger* are the British pronunciations of "schedule" and "figure." Place-names like Leicester, Harwich and Auchinlek are pronounced by the British "Lester," "Harridge" and "Afleck." (Our Wooster is believed to be an attempt to give a phonetic spelling to the British Worcester.) Words with *er* followed by consonant ("clerk," "Derby") are pronounced as though they had *ar.*

Many words are differently stressed. The British stress "necessary" and "primarily" on the first syllable, but "papa" and "mamma" on the last. "Speciality," with stress on the *a,* is the British version of "specialty." "Laboratory" in Britain is stressed on the second, not on the first syllable, "financier" on the second, not on the last.

Among differences of spelling usage, the following are worthy of note: the British spelling for nouns ending in *-or* is usually with *-our* ("honour," "labour," "flavour"; of special interest is the notation on some British films: "Colour by Technicolor"); *x* instead of *ct* appears

in words like "connexion," "inflexion"; nouns in *-ense* normally take
-ence in Britain ("defence," "licence"; the legal document used for
the wedding of Princess Elizabeth is entitled "Licence for Marriage").
Many individual words show spelling differences: "gaol," "kerb,"
"tyre," "programme," "grey," "cheque," "jewellery" instead of "jail,"
"curb," "tire," "program," "gray," "check," jewelry."

Vocabulary and semantic differences between British and American
usage are sufficiently numerous to have warranted the compilation of
many lengthy glossaries, some of book length. In Britain, an informa-
tion bureau is an "inquiry office," a ticket agent is a "booking clerk"
(pronounced *clark*); railroad tracks are "metals," a freight car is a
"goods-waggon," and a train runs "to time." A "subway" is an "under-
pass," "underground" being our "subway"; the hood of a car is the
"bonnet," while the top of the car is the "hood"; a fender is a "wing,"
a muffler is a "silencer," and a battery an "accumulator." "Dessert" in
Britain means fruit, and you must use "sweet" if you want a dessert,
while if you ask for "biscuits" you will get crackers; "scones" (pro-
nounced *scawns*) are the nearest British equivalent of our "biscuits."
"Apartment" in Britain means a single room; for the American apart-
ment, one should use "flat" or "rooms," while an apartment house is
a "block of flats." To an English bride, a can-opener is a "tin-opener,"
a pancake turner is an "egg-scoop," and an egg-beater an "egg-whisk."
The British equivalent of a cigar-store is a "tobacconist's." An Ameri-
can worker's pay envelope is a British worker's "pay-packet." A mist
in Britain is a light fog, not a drizzle, as it is in America, and because
of this different connotation, American weather stations have given up
using the word since 1939. The British "billion" is our trillion, and
"milliard" should be used to signify our billion. Bewildering to an
American when it comes from a British telephone operator is the
expression "You're through!," which means not "You're finished,"
but "You're connected."

The difference between the English of Britain and that of America
was first noted around the middle of the eighteenth century, and the
first statement concerning the "language of the United States" appears
in 1778. By the beginning of the nineteenth century, British writers
complained that the language of the former American colonies was as
far removed from English as Italian is from Latin. Their chief critic-

isms of American pronunciation were the same then as they are today:
American pronunciation is said to be monotonous or "flat," and ex-
tremely nasal. By the middle of the nineteenth century, Englishmen
who got as far west as the Ohio Valley were struck by the "barbarity
of the English language as spoken in America," and Dickens, in 1842,
voiced a bitter complaint about the American use of the word "fix,"
which another English visitor of the period defined as having as many
possible meanings as any word in Chinese. "Notify" and "fellow-
countryman" had previously been among the very first Americanisms
to draw British fire. American writers of the period hotly retorted
that American English was less corrupt than British English, and
from the standpoint of historical phonology they seemed justified in
their assertion. Numerous attempts were made at this period, both in
the State legislatures and in Congress, to declare officially that the name
of the language spoken in the United States was the "American lan-
guage," and there are even unproved stories to the effect that after
the Revolution certain members of Congress advocated that English
be altogether discarded and replaced by Hebrew or Greek as the
official language of the United States. As late as 1920, an attempt was
made to coin the term "Unitedstatish" to describe the language of the
American Union. Today, about half the students in linguistics classes
who are polled as to their native tongue reply "American" rather
than "English."

G. B. Shaw claims that "England and America are two countries
separated by the same language," while a contemporary American
writer says that interpreters are far more needed between ourselves and
the British than between either and the French or Germans, but such
statements are humorously and paradoxically advanced, even if they
are aided and abetted by continental Europeans who hang out such
signs as "English spoken here—American understood," or who offer
to teach English in three months, or American in two months. That
the British themselves are not above such low humor is evidenced by
the following sign recently noted on a London theater marquee:
"New, sensational American Western film—English subtitles."

The fact of the matter is, however, that the two languages have
in recent times been drawing closer and closer, by reason especially of
the radio and spoken film, which bring the spoken-language peculiar-

ities of one section of the Anglo-Saxon world to the other. British terms and pronunciations which thirty years ago would not have been understood in America are now commonplace, and vice-versa.

As for the linguistic background of American English, many, but generally unsuccessful attempts have been made to link it with the tongues of origin of non-English speakers. It has been repeatedly pointed out that in the eighteenth century a knowledge of Dutch was almost indispensable in New York, while one-third of the population of Pennsylvania was German-speaking, and Franklin was afraid they might make German the official language of the Commonwealth; that in various localities in New York State records were kept in Dutch for seventy-five years after the Revolution, while French was almost as current as English in the South during the eighteenth century. Many early records of Virginia and Maryland were kept in French, and Charleston had an English and a French theater, while in eighteenth-century Philadelphia the French schools outnumbered the English, and the *Courrier de l'Amérique* was the favorite morning newspaper.

Actually, however, there is no perceptible influence from Dutch, French or German in the speech-sounds of American English, save insofar as German has given rise to a new mixed language like Pennsylvania Dutch. The influence of the African Negro languages of the original slaves on the sound-pattern of our Southern speakers is likewise unproved. "New York voice," the harsh, rasping, shrill tone capable of overcoming the din of trucks, subways and electric drills, has been attributed to the foreign background of the speakers, but the burden of proof seems to be in favor of the influence of the purely mechanical contrivances which make such a tone necessary if one wishes to be heard. Those who are too ready to admit foreign influence in the American sound-pattern should also recall that eighty per cent of the present white population of the United States has English as its mother-tongue. On the other hand, loan-words from the immigrant languages are numerous, and they are favored by the fact that American English seems to have a greater tendency to admit such words than British English.

The tongues of the British Dominions show a great deal of variety, but rather in vocabulary and expressions than in sounds or grammatical

constructions. Very generally speaking, the sounds of Australian, New
Zealand and South African English are closer to the British standard,
those of Canadian English to the American standard. Australian Eng-
lish is distinguished by a certain number of words borrowed from the
native Australian tongues, while New Zealand English has drawn
upon the Polynesian Maori of the original inhabitants. South African
English has both Zulu and Dutch (or more precisely Afrikaans) words
and expressions. A "kiwi," for instance, is a New Zealand G.I. (the
kiwi is a wingless bird native only to New Zealand), while a "spring-
bok" is a South African G.I. (the springbok is the Dutch name of a
South African gazelle). "Kapai!," a word borrowed from the language
of the Maori natives, is New Zealand slang for "Attaboy!" "Inkoos" or
"inkosi" is the Zulu word for "chief," and is used even by white South
Africans with the meaning of "thanks" for a favor received, some-
thing reminiscent of the feudal act of homage, which the vassal did
in return for the fief he got from his overlord. "The river is down"
in South Africa means that there is a flood; also, you "trek" at "schim-
mel day" instead of setting out at dawn, while "mealy-meal" is the
name of the popular South African ground maize. "Cooee!," a native
Australian call, is the Australian "yoohoo!"

Expressions derived from the local background parallel our own.
"Big scrub" and "great outback" are the Australian equivalents of our
"great prairie" and "great plains." "Blackfellow's gift" is the Australian
counterpart of "Indian giver." "Wurley" and "humpy" are the
Australian equivalents of "wigwam" and "tepee." Just as American
place-names often come from the Indian languages, Australian place-
names are frequently of native origin, like Woogarora and Maran-
garoo.

Canadianisms which have no counterpart in the United States or
Britain are comparatively rare. One of them, in addition to those
listed under "Slang," is "The Gridiron" for "Old Glory"; another is
"toadskin" for "dollar bill." A third is "to stand sam" for "to treat"
someone to something (Australia uses "to shout" in the same meaning).

Semantic shifts in words which lie on the borderline between legiti-
mate and slang vocabulary are frequent. In both Australia and New
Zealand, "graft" means "hard work"; "chewing the rag" means not

to chatter away, but to brood over something; "to snowdrop" is "to swipe."

The dialect of Australia, which is particularly original and picturesque, has been the subject of numerous articles and books. The Australians call Italians "Dingbats," Englishmen "Pommies," Scotsmen "Geordies," and New Zealanders "Enzedders" (the last comes from the initials N.Z., the last letter of the alphabet being called "zed" in all parts of the British Empire, something that enabled immigration officials to distinguish between authentic Americans and authentic Canadians during the war).

In Australia, you don't "smooch a jane," you "smooge a sheila"; you don't get "plastered," but "shikkered"; you don't "borrow dough from a side-kick," but "bot some oscar from your cobber." Australian has borrowed heavily from American English, though giving it its own twist. Our "bonanza" has become "bonzer"; "sockdolager" has turned into "sollicker"; "whole caboodle" has become "whole caboose"; "give it a twirl" has turned into "give it a burl"; "whiz" has become "swiz"; "wade into someone" is now "weigh into someone."

More than any other world-language, English has given rise to pidginized versions. The basis of a pidgin language is what the scientists call "hypocorism" and the layman "baby-talk." It stems from the erroneous belief that it is easier for a baby or an untutored native to learn to speak if the language is "simplified." The simplification often takes the form of grammatical incorrectness, such as saying, and teaching the baby to say: "Him see?" for "Does he see?" Other features are the creation of words and suffixes, like "snookums," "baby-ums," etc. Modern psychology shows us that hypocorism is not only unnecessary, but definitely harmful, and that a young child may be taught to speak a language as correctly as a university professor.

Pidgin is in the nature of baby-talk imparted by and to adults. Its use arose in the seventeenth century in the seaports of southern China, where British traders sought a compromise language between their own and the Chinese of the natives. The observation having been made that Chinese syntax was of the "simplified" or isolating type, the compromise hit upon was to use, for the most part, English words, but with native syntactical arrangement and concessions to native

pronunciation. The word "pidgin" itself is the Cantonese corruption of English "business."

From the trade ports of China, the use of pidgin spread southward to the islands of Melanesia, giving rise to the pidgin *par excellence,* Melanesian pidgin English. The old Chinese sentence-pattern, however, generally continued to be adhered to.

The total number of people using some form or other of pidgin English is estimated at about thirty million. Most of them are located on the China coast, the South Sea islands, Australia, Malaya, and the west coast of Africa. The territorial extent of pidgin English may be judged from the fact that during the war the Japanese issued leaflets in pidgin for use in the islands they had conquered.

Pidgin is anything but a unified speech, though there is a certain measure of standardization. In addition to the original Chinese-English pidgin, there is the Melanesian variety, current in the Solomon, Fiji and New Hebrides islands; a variety used in New Guinea; one used by the Blackfellows of Australia; a *beche-la-mar,* or "Sandalwood English," that appears in Tahiti, Samoa and other islands of Polynesia; a West African pidgin spoken along the African coast from Nigeria to Southwest Africa; a Kitchen Kaffir used in the Union of South Africa and Rhodesia; an Anglo-Indian, or "Hobson-Jobson," used in India; a Ningre-Tongo or Jew-Tongo used by descendants of slaves along the Surinam coast in Dutch Guiana; even a Chinook Jargon, formerly current in our northwestern States, and a Negro-American pidgin called Gullah, once spoken along the South Carolina coast, which is now all but extinct. To this list may perhaps be added Pochismo, a pidgin that has grown up in Mexico along the American border and is extensively used by our border patrols in their dealings with Mexican immigrants (the name comes from *pocho,* "discolored").

A few samples of the type of expression appearing in these various compromise languages may be of interest. In Chinese pidgin, "cow-child" and "bull-child" are used for "girl" and "boy," while "bishop" is "top-side-piecee-Heaven-pidgin-man." "Chin-chin" is "worship," "chop-chop" is "quickly," and "have-got-wata-top-side" is "crazy."

In Melanesian pidgin, *kai-kai* is "to eat"; *kinkenau* is "to steal." "Shoot 'im kai-kai" means "serve the dinner"; "capsize 'im coffee along cup" is "pour the coffee." "Man-belong-bullamacow" is

"butcher," while "man-a-wiwi" is "Frenchman" (the man who says "oui, oui"). The pidgin expression for "I am hungry" is "belly-belong-me-plenty-walk-about." For "I am going to study," the expression is "makem-head-belong-me-walk-about-longa-too-much-papa-yabber" (the last two words are the equivalent of "book-talk").

Pidgin (English or otherwise) is on the one hand a marker of man's inefficiency and erroneous thinking, on the other a monument to human ingenuity. It displays the multiplicity of wrong roads which the human mind occasionally takes, but also the relentless will of man to create understanding under the most difficult of circumstances. The fact that English, more than any other tongue, has given rise to pidgin forms is a tribute to the mighty force of expansion of the English language.

A tongue which in the brief space of four centuries has multiplied its speaking population five thousand per cent, and which, in addition to its own 250 million speakers has some 30 million persons using it in pidgin form is a tongue that has proved its practical importance. Whether this is such as to entitle it to make the winning bid for the post of the universal language of the future is something we shall go into later.

The projection of the English language into the future is perhaps an idle speculation. The present trend of the language seems to point in the direction of greater unification and standardization, brought about by improved systems of communication and education, and by a tendency toward centralization, even of a political variety, on the part of its numerous and far-flung speakers. This, however, is coupled with a rapid rate of change and accretion, both by native coinage and by foreign importation.

Granted a continuation of present historical conditions, the English language of two hundred years hence will be likely to represent a merger of British and American phonetic habits, with comparatively little in the way of morphological or syntactical innovations, but with a turn-over in vocabulary and semantics that would make it difficult, not to say incomprehensible, to the English speaker of today.

SCANDINAVIAN, DUTCH AND GERMAN

I have shown that the German language needs reforming.—Mark Twain, "The Awful German Language"

German, Dutch, Swedish, Danish, Norwegian and Icelandic fill out the official, national roster of the Germanic family of languages. Minor members, sometimes classed as languages, sometimes as variants or dialects, are the Flemish of Belgium, the Frisian of the Dutch and German North Sea coast, the Afrikaans of South Africa, the Yiddish of the northern or Ashkenazic Jews, the Schweizer-Deutsch of Switzerland, the Pennsylvania Dutch of the United States.

Before the outbreak of the Second World War, German was spoken by over eighty million people in the Reich, Austria, Switzerland, and regions like the Sudetenland of Czechoslovakia, the Polish Corridor and the Free State of Danzig, Danish Slesvig, French Alsace-Lorraine, Belgian Eupen and Malmédy, Luxembourg, even the Saratov region of Russia. It was widely used as a secondary, cultural and business language throughout central Europe, including the Netherlands, the Scandinavian and Baltic countries, Poland, Czechoslovakia, Hungary and Yugoslavia. In addition, it was spoken by several millions of German immigrants and their descendants in North and South America, particularly the United States, the Brazilian States of São Paulo and Rio Grande do Sul, Argentina and Chile. It is probably no exaggeration to say that well over one hundred million people can still be reached with it.

Dutch, with its Belgian variant, Flemish, and its South African variant, Afrikaans, is spoken by some thirteen million people in the Netherlands and Belgium and by perhaps two million in the Union of South Africa, who are descendants of the original Boer settlers from

Holland. The Dutch colonial empire, with over sixty million people in the East Indies alone, is to some extent subject to Dutch linguistic influence.

The Scandinavian languages, Swedish, Danish, Norwegian and Icelandic, have approximately six and one-half, four, three million and 120,-000 speakers, respectively. Faroese, the tongue of the Faroe Islands, is a cross between Danish and Icelandic. It may be mentioned at this point that while Finland has enjoyed close political relations with Sweden in the past, and while Swedish is still extensively spoken along the Finnish coast, the Finnish language is definitely not a Scandinavian tongue, or, for that matter, an Indo-European one.

German and Dutch belong, like English, to the West Germanic branch, while the Scandinavian tongues are of the North Germanic variety. A third Germanic branch, the Eastern, was represented by ancient Gothic, which has become extinct.

Historically, the Germanic languages appear comparatively late on the world's scene, but this is due merely to the absence of written records, not to the fact that a Proto-Germanic tongue was not spoken contemporaneously with Sanskrit, Greek and Latin. The fourth century A.D. Gothic translation of the Bible by the Bishop Wulfila is the earliest satisfactory record of a Germanic tongue. Some Runic inscriptions found in Norway and Denmark may go back to the third, or even the first century A.D., but of this there is no sure proof.

Among early Germanic (or Teutonic) languages are Old Saxon, of which we have a ninth-century literary monument, the *Heliand* or *Savior,* Old Franconian, from which Dutch stems, Old High German, the ancestor of modern German, and Anglo-Saxon, from which modern English is derived. All of these tongues begin to appear in satisfactory recorded form between the seventh and the ninth century A.D. Scandinavian records, save for Runic inscriptions, do not begin till the eleventh or twelfth century.

Beginning with the eighth century, the history of the various Germanic languages, including English, can be traced with fair accuracy. At the time of their first recorded appearance, the Germanic languages had already distinguished themselves from the other Indo-European tongues by a shift in certain consonant-sounds, whereby an Indo-European *d* became *t, t* became *th, p* became *f, k* became *h,* etc. This

is well exemplified by words like English "tooth" and "foot," which appear in Latin, Greek and Sanskrit as *dent-, odont-, dant-,* and *ped-, pod-, pad-,* respectively. A second characteristic of the Germanic languages is a tendency to umlaut, which may be described as the fronting of a back vowel in the root of a word by reason of anticipation of a front vowel in the ending; this is exemplified by German *Satz,* plural *Sätze,* or Danish *Fod,* plural *Födder,* in which the *a* or *o* of the root become *ä* and *ö* because the speaker unconsciously prepares for the more frontal position of the *e* of the plural ending; English "foot," "feet" and "mouse," "mice" show the identical phenomenon, but with the added feature that the vowel-sound of the ending, after having caused the change in the vowel of the root, dropped out. A third characteristic of Germanic languages is the division of verbs into two classes, weak, forming the past and past participle by means of an ending (like English "love," "loved," "loved") and strong, where the past and past participle show a change of the vowel of the root (like English "sing," "sang," "sung").

One of the main distinctions between the Scandinavian and the West Germanic members of the family is that the former have developed a postposed definite article, so that an expression like "the boy" appears as "boy-the." Another is the Scandinavian formation of the passive of verbs by the addition of -*s,* or the change of an -*r* ending of the active to an -*s.* In Swedish, for instance, *jag kallar* is "I call," *jag kallas* "I am called." English, Dutch and German, on the other hand, use an auxiliary to form the passive ("to be" in English, "to become" in German and Dutch). Since it has been determined that this -*s* of the Scandinavian passive is in origin a reflexive pronoun, like "self" of English or *se* of Latin, the question arises whether it betokens a special connection with Slavic, which likewise forms its passive by means of an invariable reflexive pronoun. The link, on the other hand, may be with the old Indo-European middle voice, showing the subject acting on or for himself.

There is also a decided vocabulary difference between North and West Germanic. English generally uses words which have a cognate in German and Dutch (our "great," for example, coincides with Dutch *groot* and German *gross,* not with Scandinavian *stor*); but since the Danish occupation of parts of England brought many Scandinavian

words into Anglo-Saxon, we find occasional coincidences with Scandinavian (our "die," for instance, is the Scandinavian *dö;* Dutch *sterven* and German *sterben* have a cognate in English "starve," but the latter has acquired the special connotation of "to die by inanition").

Within the West Germanic branch there occurred about the eighth century A.D. a further differentiation between Low and High German. The West Germanic dialects of the south, particularly in the Alpine region, underwent a second consonant-shift, whereby in certain positions *d* became *t, th* became *t, t* became *ss* or *z, p* became *f* or *pf, k* became *ch,* etc. English and Dutch, which were originally Low German dialects of the North Sea coast, did not participate in this change, but High German, which eventually gave rise to standard modern German, did. The result is that today English and Dutch have *d* in "cold" and *koud,* "good" and *goed,* but German *kalt* and *gut* show *t;* English "two" and "water," Dutch *twee* and *water* have *t,* but German *zwei* and *Wasser* have *z* and *ss;* English "break" and Dutch *breken* have *k,* but German *brechen* has *ch;* English "lope" and Dutch *loopen* have *p,* but German *laufen* has *f.* English "dapper," with *d* and *p,* is German *tapfer,* with *t* and *pf.* The second sound-shift sets German apart from the other Germanic languages to such an extent that a Scandinavian word often seems more similar to English than the historically more closely related German word.

Among the Scandinavian languages, special mention must be made of Icelandic for its archaism. All other Germanic languages give evidence of a trend away from the old Indo-European synthetic structure and toward analysis. Icelandic, however, has been described as a linguistic living fossil, displaying the same structure that appeared in the days of the Vikings. The four cases of the ancient Germanic languages (nominative, genitive, dative and accusative) are still very much alive in Icelandic. The noun is fully declined, and so is the suffixed article. A sample of this plethoric declension is the following: *heimur-inn* ("the world"—subject); *heims-ins* ("of the world"); *heimi-num* ("to the world"); *heim-inn,* ("the world"—object); *heimar-nir* ("the worlds"—subject); *heima-nna* ("of the worlds"); *heimu-nun* ("to the worlds"); *heima-na* ("the worlds"—object). Adjectives and most pronouns are fully declined. A trace of the dual number appears in the personal pronoun: *vid-* ("we two"); *vjer* ("we"—more than two).

Verbs carry a full set of conjugational endings. The verb "to have" in the present runs as follows: *hefi, hefir, hefir, höfum, hafið, hafa.*

By way of contrast, the other three Scandinavian languages have a simplified system of noun-declension, wherein there is only one form for the singular and one for the plural, plus a genitive or possessive universally formed by the addition of *-s.* A distinction is made between nouns which are neuter and those which are "gender" (*i. e.,* masculine, feminine or common), but this distinction appears only in the article and occasionally in the adjectives that accompany the noun (*gosse-n,* "the boy," but *arbete-t,* "the work"). Characteristic of Swedish and Norwegian is the use of a double article when an adjective precedes the noun (*den dåliga gosse-n,* literally, "the bad boy-the"). In spoken Swedish, Norwegian and Danish, verbs are simplified to a point that outstrips English; a single form means "am," "is," "are"; another single form takes care of "was" and "were."

Modern Swedish, Norwegian and Danish are fairly close, and the speaker of one of these tongues can generally manage to understand the others. Danish was at one time the official and literary language of Norway, but popular spoken Norwegian always diverged from the Danish literary standard. Present-day literary Norwegian is largely based upon the popular spoken-tongue, or *Landsmål,* and the spelling has discarded certain Danish characters and replaced them with Swedish orthographies.

Despite the fact that there is more difference between two so-called dialects of Italian, like Sicilian and Piedmontese, than between any two of the three main Scandinavian languages, the Scandinavians are quite touchy about the individuality of their languages. It will definitely not do to tell a Norwegian that he is speaking a variant of Danish, or vice-versa. This writer at one time erroneously used a Danish orthography in a Norwegian sentence, and a Norwegian correspondent indignantly wrote back: "That spelling is Danish, and the Danes can keep it!"

Of particular interest to English speakers are the numerous words that have come into the Scottish dialect from Scandinavian. Bobbie Burns's "braw" and "bairn," to take only two examples, are directly traceable to Scandinavian *bra* and *barn.* Other Scandinavian words, like "skoal," "ski," "slalom," "saga," "Edda," "geyser," "smörgåsbord,"

have recently gained full citizenship in the English language, just as other Scandinavian words which gave us "sick," "die" and "them" did over a thousand years ago.

Dutch, English's closest kin among the national tongues, is a language replete with guttural sounds and misleading spellings. The letter *g* normally indicates a rasping guttural in Dutch (*goed* is pronounced "hood") and the combination *sch* denotes not the *sh*-sound of English, but an *s* quickly followed by a guttural fricative; that is why Dutch names in America, spelled with *sch,* like Schuyler, Schuylkill, Schermerhorn, are pronounced with a *sk*-sound. Written double vowels (as in *raad, heet, groot*) do not indicate length, but only soundquality. A diphthong like *ui,* which is claimed to have given rise to our Brooklyn "boid" for "bird," actually represents a sound closer to the *ou* of "house" as spoken in Virginia (a more precise counterpart is the *eui* of French *deuil*). Grammatically speaking, Dutch has simplified itself almost to the same point as English, at least in its spoken variety. Only a trace of the possessive in *-s* remains (*de dochter van de fader* is more common than *de faders dochter*). The indirect object is generally expressed, as in English, by its position before the direct object (*ik heb Oom Jan een brief geschreven,* "I have written Uncle John a letter"). The plural ending is *-en,* less frequently *-s.* Adjectives and pronouns present few difficulties, and verb-conjugation strongly resembles English, save that there is normally an *-en* in the plural forms. But Afrikaans, the South African variant spoken by the Boers, dispenses even with these endings, and has a single form that is used straight through the tense, being differentiated only by the subject pronoun. It is from Afrikaans rather than from Dutch proper that we get words like "boss," "spoor," "trek" and "veld." Dutch, on the other hand, gives us "slaw," "spa," "blunderbuss," and the *vrijbuiter,* or "freebooter," that turns into "filibuster."

Official written Dutch, which stems from the fifteenth-century Flemish of Belgian Flanders and Brabant, rather than from the spoken form of the provinces that today constitute Holland, is much more conservative, retaining even a semblance of a four-case declension. Differences between the written and the spoken form are especially striking in vocabulary, the formal expressions of the written tongue

often being jocularly referred to as *stadhuiswoorden,* or "city hall words."

German, as the language of a great and populous nation, is naturally divided into numerous dialects, some of which, particularly in the coastal area, have a sound-scheme that approaches that of English and Dutch (in Hamburg, for instance, *stehen* and *sprechen* are pronounced with the *s*-sound of English instead of the *sh*-sound which is normal in German for *s* before *t* or *p*). Austria, Bavaria, Switzerland have very well-defined High German dialects, and a few Swiss nationalists even advocate the rejection of standard German as the official tongue of the German-speaking cantons of the country, and the adoption in its place of the local *Schwyzer-Teutsch.*

Among the variants of German is Yiddish, which goes back to the German Jewish communities of the Middle Ages and has been generally adopted by the northern European Jews as a language of common intercourse. It is written with a modified Hebrew alphabet and has borrowed from both Hebrew and various European languages outside of German; but it is still fundamentally a strongly conservative Renaissance German. In the Jewish communities in America it has been largely interlarded with English words, and has at the same time made numerous contributions to the American vocabulary (*kibitzer* is one of our more recent acquisitions from this source).

Printed German normally makes use of the Black Letter alphabet, which at one time was current in England as well, and which occasionally still appears in Scandinavian writings of the past centuries. The use of the angular German hand-script, on the other hand, is more limited. Among spelling peculiarities, German is in the habit of capitalizing all nouns, both proper and common, and in this is accompanied by Danish.

The sounds of spoken German present relatively few difficulties to the English speaker (Mark Twain, in one of his writings, humorously undertakes to prove that any American can speak German if he wants to). One of the few phonetic stumbling-blocks is the *ch*-combination, which is a rasping guttural if it follows a back vowel, a hissing palatal if it follows a front vowel or a consonant. The Germans conveniently label these sounds the *ach-Laut* and the *ich-Laut,* these names giving even a reasonable clue as to the position in which each of them occurs.

Yiddish, which broke away from German at a time when only the *ach-Laut* existed in all positions, still has the rasping guttural instead of the hissing palatal in words like *ich* and *nicht*.

The German grammatical scheme retains the four official Germanic cases (nominative, genitive, dative, accusative), but the distinction among them appears rather in the article than in the noun. A sample of the German declensional scheme is a noun like *der Bruder* ("the brother"), which is used as the subject; "of the brother" is *des Bruders;* "to the brother" *dem Bruder;* "the brother," as the object of the verb, *den Bruder*. In the plural, "the brothers" used as subject is *die Brüder;* "of the brothers" *der Brüder;* "to the brothers" *den Brüdern;* "the brothers," used as object, *die Brüder,* like the nominative, but distinguished by position after the verb or some other syntactical device. Only the genitive singular and the dative plural have endings that differ from the general singular and the general plural forms.

German gender is largely unpredictable. Typical of this unpredictability are the names of three common table tools: "the spoon" is *der Löffel,* masculine; "the fork" is *die Gabel,* feminine; "the knife" is *das Messer,* neuter. One cannot even rely on the general linguistic rule that nouns indicating males are masculine and those indicating females feminine, since the diminutive endings *-chen* and *-lein* turn any noun to which they are attached into a neuter, with the result that *Mädchen* ("girl"; the English cognate is "maiden") and *Fräulein* ("miss"; a diminutive of *Frau,* "woman") are declined and treated as neuter nouns. Certain suffixes carry with them a certain gender; *-heit, -schaft, -ung,* for example, form abstract nouns which are feminine, while *-tum* forms neuter abstracts. But here another difficulty rises to plague the English learner. The English cognates of *-heit, -schaft, -ung* and *-tum* are respectively *-hood, -ship, -ing* and *-dom,* but their application almost never corresponds. *Freiheit* is English "freedom," not "freehood"; *Knechtschaft* is not "knightship" or even "knighthood," but "slavery"; *Altertum* is not a non-existent "olderdom," but "antiquity." Perhaps it is English that is at fault for using so many borrowed words and suffixes from non-Germanic sources; at all events, the process of literal etymological translation of two parts of a compound word is highly dangerous, and almost invariably leads to disaster.

The German adjective-declension is a difficult matter. The attribu-

tive adjective takes a "strong" ending, that bears indication of gender, number and case, provided it is not itself preceded by an article or some similar word that bears such an ending. If the preceding article, possessive or demonstrative bears an ending indicative of gender, number and case, then the adjective takes a "weak" ending (*-e* or *-en*). Lastly, if the adjective is used after the verb "to be," it takes no ending whatsoever. This means that in an expression like "a good man" (*ein guter Mann*), since *ein* bears no inflectional ending, the adjective *gut* must take on the *-er* suffix indicative of nominative case, masculine gender, singular number. But in *der gute Mann* ("the good man"), where the article *der* bears the significant *-er* ending, the adjective can take a subordinate position and assume a non-committal ending like *-e*. In *der Mann ist gut* ("the man is good"), where the adjective follows the verb "to be," no ending whatsoever is used. It may be added that a certain lesser degree of this complication appears also in the Scandinavian languages and in Dutch; English is the only Germanic language that has had the courage to make the adjective altogether and under all circumstances invariable.

The German verb bears a full set of personal endings, but also requires the use of a subject pronoun. In addition to this, many strong verbs effect a change of root-vowel in the second and third persons singular of the present (*ich sehe,* "I see," but *du siehst,* "you see," *er sieht,* "he sees"). In addition to the two original Germanic tenses, present and past, German, like English, Scandinavian and Dutch, has developed a full system of compound tenses formed by means of auxiliaries. The future and conditional are both formed with *werden* ("to become") and since this verb is also used as an auxiliary to form the passive voice, one must carefully note whether it is followed by the infinitive or by the past participle. In the former case, it is a future or conditional active form, in the latter, a present or past passive form: *ich werde rufen* (literally "I become to call") is "I shall call," but *ich werde gerufen* (literally "I become called") is "I am called."

Perhaps the most distressing feature of German to an English learner is its word-order. If the subject does not begin the sentence, it normally follows the verb ("On Monday went we home"). A past participle is normally separated from its auxiliary by the object and adverbial modifiers ("I have a letter early written"). In a dependent

clause, the verb usually appears at the end ("I know not, where you this book bought have"). An infinitive is normally separated from its governing verb and placed at the end of the sentence ("Shall we now home go?"). All of these syntactical traits, and others as well, have been properly and repeatedly satirized by English humorists, but to no visible avail.

Grimm's laws of sound-correspondences and the etymological connections between English and German are occasionally of use in the study of the German language, but they are just as often misleading. *Langsam* is etymologically "longsome," but means "slow"; *wohl* is "well," but *gut* is the word that most often translates "well"; *unter* may be "under," but it is also "among"; *überall* looks like "overall," but really means "everywhere"; *Zeit* is "tide," but means "time"; *Zeitung* is "tiding," but is regularly used for "newspaper"; *fast* is not "fast" but "almost"; *bald* looks like "bold" but means "soon"; *wenn* is "if" rather than "when." Similar confusing etymologies appear in the other Germanic languages which have retained a higher proportion of the old Germanic vocabulary than English has.

Yet the intimate relationship among the various Germanic tongues cannot be denied. An expression like "good morning" is *guten Morgen* in German, *goeden morgen* in Dutch, *god morgon* in Swedish, *god morgen* in Norwegian and Danish. "Here is" is *hier ist, hier is, här är, her er.* "I'm thirsty" is *ich bin durstig, ik heb dorst, jag är törstig, jeg er tørst.* "Give me" is *geb' mir, geef mij, giv mig, gi meg.* When we compare these extremely common expressions with their Romance or Slavic equivalents, we see why English is classified as a Germanic tongue, and why learning to speak English is generally easier for a Norwegian than for a Pole or a Spaniard.

THE ROMANCE TONGUES

I love the language, that soft bastard Latin,
Which melts like kisses from a female mouth.—Byron "Beppo"

The name "Romance" comes from the Latin expression *romanice loqui* ("to speak in Roman fashion"). All other meanings of "romance," it is well to note, are derived from this original use.

Preoccupation with descent from the Romans was the primary consideration of Latin speakers in the dark days after the fall of the Roman Empire. A term, "Romania," was coined in the fifth century to denote those regions of the former Empire where the language of the Romans continued to be spoken. This term was later appropriated by the Rumanians as a name for their own land. The province of Romagna in Italy is the same word, differently treated. The first reference to a Romance language, appearing in Charlemagne's proclamation of 813, describes it as *lingua romana rustica* ("rustic Roman tongue"). The medieval Spanish word *romance,* used to describe the new language of Spain, and the Old French verb *enromancer* ("to put into Romance," "to translate into the vernacular"—whence comes the use of "romance" as a tale of fiction, unworthy of Latin, and composed in the tongue of everyday speech) are further demonstrations of this nostalgia for Rome on the part of those who still spoke the language of Rome.

The national Romance languages of today are five in number: French, Spanish, Italian, Portuguese and Rumanian. To these may be added several non-national forms which are nevertheless usually classed as languages (Provençal, Catalan, Sardinian, Rheto-Rumansh, Dalmatian), plus a very large number of dialects.

Had the course of history run differently, it is likely that we would have today three additional Romance tongues, one spoken in North

Africa, another in Britain, a third in the western part of the Balkans. Under the Empire, Latin flourished as a popular spoken-tongue in the lands that today constitute Morocco, Algeria, Tunisia and Libya, while the colonies first planted on British soil by Julius Caesar succeeded to a considerable degree in romanizing the Celtic-speaking Britons. But the great Moslem sweep of the seventh and eighth centuries of our era erased Latin from Africa and implanted the Koran's Arabic, while the Anglo-Saxon invasions stripped the romanized Celts of Britain of their Latin veneer. In like manner, the Latin of Illyricum, on the eastern coast of the Adriatic, was obliterated by the great Magyar and Slav infiltrations of the centuries that followed the Empire's downfall, separating the future Rumanians of Dacia from their Italian kinsmen. But the Vulgar Latin of Illyricum, developing into a Dalmatian form of Romance, survived for a long time in cities like Ragusa, Spalato and Trau on the coast of Dalmatia; and in one of the Adriatic islands, Veglia, a form of Dalmatian Romance continued to be spoken until the end of the nineteenth century.

Despite these staggering losses, the Roman world survived, and after a time began to march on to new conquests, particularly in the Western Hemisphere. Today, about three hundred million people speak Romance languages, which constitute, after the Germanic group, the largest subdivision of Indo-European.

French is spoken by some seventy-five million people in France, Belgium and western Switzerland, the Canadian provinces of Quebec and Ontario, and the Republic of Haiti. The French colonial empire, comprising most of North and West Africa, Madagascar, French Indo-China, French Guiana, and numerous Pacific and Antillean islands, has a population of over eighty million, of which perhaps one-fourth can be reached with French. In addition, French is one of the great world-languages of common intercourse, second only to English in that function. It is current in Europe, where over five million people outside of the countries to which French is native speak the language. It is current in Asia and the Near East, in Central and South America, where the majority of educated people have learned it, even in North America, where it is one of the leading high school and college languages.

Spanish is the tongue of about twenty-five million people in Spain

and the Spanish African colonies. It is also the tongue of some eighty million inhabitants of the Western Hemisphere. All of South America, outside of Brazil and the Guianas, all of Central America, Mexico and the two Caribbean islands of Cuba and Puerto Rico, as well as the Republic of Santo Domingo, speak Spanish, which is widely spoken and studied in the United States as well.

Portuguese is the language of the eight million inhabitants of Portugal and the official tongue of the two large and flourishing Portuguese African colonies of Mozambique and Angola. It is also the tongue of Brazil, which contains nearly half of South America's one hundred million inhabitants.

Italian, spoken by forty-five million people in Italy, is the language of large emigrant communities in North and South America and in the Mediterranean area. It is also, in superlative measure, the language of music and art.

Rumanian, with between fifteen and twenty million speakers, most of whom are located on Rumanian soil, is the smallest of the national Romance languages, and one of the most interesting to linguists, since it represents a special development of Latin uninfluenced by the currents that were common to the four contiguous Romance lands of the west. French, Spanish, Italian and Portuguese may be compared to four brothers who have grown up together; Rumanian is like a fifth brother who was separated from the family at the age of six, placed in a completely different environment, and then reunited with the others at the age of twenty.

The non-national Romance tongues and the dialects of the major tongues present the most diversified and picturesque aspect. The Provençal of southern France was a highly polished literary tongue in the Middle Ages, until the Albigensian Crusade broke its backbone. The lyric form of modern poetry, the love sonnet, the *contrasto* of Italy and the *jeu parti* of France all had their inception in the rich and beautiful literature of eleventh- and twelfth-century Provence. Today Provençal is only a series of local dialects and *patois*, which Mistral in the nineteenth century vainly attempted to restore to literary form.

The Catalan spoken in Spanish Catalonia and the adjoining French region of Roussillon, as well as in Valencia, Andorra and the Balearic Islands, managed on the contrary to retain its literary form throughout

the centuries. The Spaniards would like to classify it as a Spanish dialect, the French as an offshoot of Provençal, but the Catalans proudly cling to their linguistic individuality. Even today the *jocs florals de la llengua catalana* ("floral games of the Catalan tongue," a literary and poetic contest in which writers and poets vie for prizes) are held by Catalans in exile from their native land.

The two dialects of central and southern Sardinia, Logudorese and Campidanese, are so completely different from Italian and come so close to the Latin of Classical times that many Romance linguists consider them the most archaic and conservative of all the Romance species. Logudorese, in particular, still keeps the Latin vowels unchanged and retains the Latin guttural sounds before front vowels, which became palatals in practically all other Romance areas. "Pear" is still *pira* in Logudorese, as it was in the lower-class Latin of Cicero's days (Spanish and Italian have changed it to *pera*, French to *poire*); "hundred" is *kentu* (Latin *centum*, with *c* pronounced as *k;* French *cent*, Spanish *ciento*, Italian *cento* retain the *c*-spelling, but the sound today is *s, th* or *ch*). The insular, comparatively remote position of Sardinia is supposed to account for this extraordinary conservatism.

The Rhetian varieties of the Alpine region are also known by the names of Rumansh, Rheto-Rumansh and Ladin. On Swiss soil, Rhetian is spoken in the Engadine and Grisons by less than a hundred thousand people; on Italian soil, it appears in some isolated valleys to the east and west of the river Adige, and in the great plain of Friuli, northeast of Venice, and Italian speakers of Rhetian number well over half a million. Many Italians choose to consider Rhetian as an outgrowth of the North Italian dialects, and in protest against this point of view the Swiss Government some years ago made the Engadine variety of Rhetian a fourth national language of Switzerland, where three tongues, German, French and Italian, were already official.

Within the national languages themselves strong dialectal divergences are to be noted. French, even exclusive of Provençal, is by no means the local spoken tongue of all of northern France. In the Middle Ages, Francien, the dialect of the Paris region, from which the literary French language ultimately stemmed, was under severe competition from the local dialects of Picardy, Normandy, Lorraine and southern Belgium. Many of the French forms that came into England with the

Norman conquest are Norman-Picard rather than Francien. "Catch"
and "chase," for example, are originally the same Vulgar Latin word
captiare, from which we also get the learned "capture"; but *captiare*
in Francien became *chacier,* later *chasser,* from which English gets
"chase," while in Picard it gave rise to *cachier,* which came into English
as "catch." In like manner, from Latin *capitalis* we have the learned
"capital," the originally Francien "chattel," and the originally Norman-
Picard "cattle."

Spanish, in addition to its medieval dialects, Leonese, Aragonese
and Mozarabic, which were largely crowded out by Castilian, has an
Andalusian form which gave rise to most of the Spanish-American
varieties, an Asturian dialect, spoken in the north, and an infinity of
minor local peculiarities. One interesting offshoot of Spanish is the
Ladino (not to be confused with the Ladin of the Rhetian areas)
spoken by the descendants of the Spanish Jews who were forced to
leave Spain in the fifteenth century and who settled in various localities
along the Mediterranean basin, particularly around Monastir and
Salonika in the Balkans, forming the so-called Sephardic, or southern
Jewish communities. Ladino is a strongly conservative fifteenth-cen-
tury Spanish interlarded with words borrowed from Greek, Turkish,
Arabic and other Mediterranean tongues and written, like Yiddish,
with a modified Hebrew alphabet.

Galicia, in the northwestern corner of the Iberian Peninsula, belongs
politically to Spain, but linguistically to Portugal. Indeed, the Galician
of the Middle Ages, which had a flourishing literature even before
Castilian did, was in large part responsible for the growth of Portuguese.
Many local divergences appear on Portuguese soil, but among the most
striking varieties of Portuguese are the ones which appear in the
Azores and the numerous local dialects of Brazil.

Italian has a Gallo-Italian series of dialects, covering the north-
western part of the peninsula and displaying strong affinities with
French and Provençal; a Venetian group; a mass of central dialects, in-
cluding the literary Tuscan, the dialect of Rome and the native speech
of Corsica; a southern brand of which Neapolitan is perhaps the most
representative member; and a Calabrian-Sicilian variety spoken in the
extreme south and on the island of Sicily. The range of variety of the
Italian dialects is amazing; a form like "to comb," which in standard

Italian is *pettinare* (from Latin *pectinare*), become *pittinari* in Sicily and *pnär* in Bologna.

Rumanian, outside of minor localisms appearing in the provinces of Moldavia, Wallachia, Bessarabia, Bukovina, Transylvania, etc., has produced two offshoots which diverge considerably from the mother-tongue, one spoken in southern Macedonia, the other in Istria, on the Italian-Yugoslav border.

The Romance languages differ phonetically more than they do structurally. Written Portuguese, Spanish and Italian are to a large degree mutually comprehensible; but while a Spaniard and an Italian can manage to understand each other, a Spaniard and a Portuguese will encounter increasing difficulties, and an Italian and a Portuguese will have still greater trouble. French is phonetically in a class by itself and cannot be understood without special study by the speakers of any other Romance language, while Rumanian, which would not present insurmountable phonetic difficulties to an Italian or Spanish speaker, is structurally out of their reach.

On the grammatical side, all of the Romance languages have given up the neuter gender, absorbing Latin neuter nouns into the masculine or feminine category; this means that a pencil is referred to as "he," a pen as "she." All, with the exception of Rumanian, have "simplified" their noun morphology to a point that outstrips even English. No trace of the Latin case-system survives; a single form for the singular and one for the plural are general. The majority of masculine nouns end in -o in Spanish, Portuguese and Italian, in a consonant in French. Feminine nouns generally end in -a in the first three languages, in -e in French. In addition, Spanish, Portuguese and Italian have a number of nouns of either gender which end in consonants or in -e. Spanish, Portuguese and French generally form the plural by adding -s, Italian by changing -o to -i, -a to -e, -e to -i.

All the Romance languages have developed a definite article out of the Latin demonstrative pronoun *ille*, but while the western languages place the article before the noun, Rumanian attaches it to the noun; thus "the wolf," which in Classical Latin was simply *lupus*, became in Vulgar Latin *ille lupus* or *lupus ille*, and is today *le loup* in French, *el lobo* in Spanish, *o lobo* in Portuguese, *il lupo* in Italian, but *lupul* in Rumanian.

Adjectives agree in gender and number with the noun they modify in all the Romance languages. This does not mean that the adjective and the noun will necessarily have identical endings, since the noun may be of the -o class, the adjective of the -e class, or vice-versa.

Verbs, unlike nouns, have undergone considerable change, but no appreciable process of simplification. Indeed, a Romance conjugational scheme is even more complex than a Latin one, having a greater number of tenses and forms. New analytical forms were created, but the old synthetic forms were usually not discarded. The result is that where Latin used a single form, *feci,* to express both "I made" and "I have made," the modern Romance languages have two, one derived from *feci,* the other a more recent compound of "I have" and the past participle (like Spanish *hice,* "I made," and *he hecho,* "I have made").

The syntax of Romance is to a considerable degree unified. This is due partly to kinship of origin, but also to the fact that at all periods of their history the four western Romance tongues were in constant contact, borrowing from and imitating one another. The same may be said of their vocabularies, particularly in the more learned and literary division. It would be difficult to say which of the Romance languages was the greatest giver, which the greatest receiver in this historical interchange. Italian borrowings from French go back to the days of Pepin's war against the Longobards and Charlemagne's Kingdom of Italy, while the Provençal influence is particularly strong in the *dolce stil nuovo,* the earliest current of courtly Italian literature. French and Provençal influence likewise made itself felt in Spanish and Portuguese as early as the eleventh and twelfth centuries, when the pilgrim routes across the Pyrenees led devout Frenchmen to the shrine of Santiago de Compostela in northwestern Spain and the French monks of Cluny set up their monasteries in that northern band of provinces which was free from the Moors. The Italian Renaissance contributed very heavily to the formation of French and Spanish culture in the fourteenth, fifteenth and sixteen centuries, while the French and Spanish occupations of parts of the Italian peninsula aided in the formation of the modern Italian language to the same extent that they hindered the cause of Italian political unity. Spanish world predominance immediately after the discovery of the New World led to the spreading of all sorts of new words and concepts in the sister Romance

languages. In the days of Louis XIV, the French Revolution and
Napoleon, French military, political and cultural preponderance left
its mark on all the other Romance languages. The Romance peoples
have at all times been keen students and admirers of one another's
literature and culture. All this has meant that any innovation in the
syntactical or lexical field occurring in one of the Romance tongues
stood an excellent chance of being appropriated and copied by the
others. *Romania* still exists today, and it is no accident that American
universities and even high schools ordinarily institute departments of
Romance languages rather than separate divisions of French, Spanish
and Italian.

Among the individual Romance languages, French is distinguished
by reason of its phonetic pattern, the comparatively large divergence
between its spoken and its written form, and its deliberately sought
lucidity of style and regularity of syntactical arrangement. It is the
last-named qualities that make French an ideal language both for
the compilation of diplomatic, legal and business documents, in which
precision is of the essence, and for literary composition in prose form.
When it comes to poetic form, French is less fortunate, the modern
language having largely lost the element of stressful rhythm that
characterized the medieval tongue. Modern French poetry possesses
neither the device of quantity (the regular alternation of long and
short syllables so typical of the Classical languages), nor the more
modern accentual effect of languages like English, German, Spanish
and Italian, whereby poetic rhythm depends upon the regular alterna-
tion of stressed and unstressed syllables. Instead, French poetry is
scanned merely by the number of syllables to the line. In the course of
its historical development, French has partly lost in rhythmical quality
what it has gained in symmetrical regularity, just as French grammar
has lost in syntactical elasticity what it has gained in precision. All
this, of course, does not mean that there is not a rhythm, and an ex-
tremely pleasing one, in the speech of a cultivated French speaker.

The sound-pattern of spoken French is dominated by the middle
rounded vowels (French *u* and *eu,* as in *lune, feu, peur*) and the full-
bodied nasals (as heard in *blanc, vin, bon, un*), both of which recur
with striking frequency in French speech. There is a theory among
some linguists to the effect that these two series of sounds, whereby

French sharply differentiates itself from most other Romance varieties, is due to the original Celtic speech-habits of the pre-Roman Gauls. This point is the subject of much controversy, and it is hardly worth while to discuss it here. Another distinctive French sound is the *r-grasseyé*, or uvular *r*, typical of Parisian, but not current throughout all of France. French phonology is further distinguished by the relative tenseness of the vocal organs in speech and by the clearly explosive quality imparted to final consonant-sounds. For the latter phenomenon, a point worth remembering is that French imparts to the final consonant of a breath-group the same force of utterance that English imparts to an *initial* consonant. In English "pat," we give special force of utterance to the initial *p*, which is accompanied by a slight puff of breath, while the final *t* is restrained and unaccompanied by a breath-explosion; in French *patte,* it is just the reverse; the *p* is lightly pronounced while the *t*-sound which ends the word is distinctly audible and accompanied by the breath-puff.

French (and, to a much lesser degree, the other Romance languages) is characterized by a tendency to link together the final consonant-sound of one word and the initial vowel-sound of the next. A phrase like *les grands hommes avaient annoncé* ("the great men had announced") sounds in speech like *lé grā zom za vé ta nõ sé*. This feature imparts to the Romance languages in general and to French in particular a syllabic rhythm of the consonant-vowel variety which is altogether at variance with the Germanic rhythm wherein most syllables end in consonants. It also tends to rob the individual word of its phonetic individuality within the spoken sentence, and to make the sentence or phrase, rather than the word, the unit of understanding to the listener.

French spelling is highly traditional, though not to the same degree as English. This means that many letters representing sounds that the spoken tongue has not pronounced for centuries continue to be written. In *ils tiennent* ("they hold"), for example, the final *-s* of *ils* and the final *-ent* of *tiennent* are silent, though they were at one time pronounced. There are numerous minor irregularities of spelling and pronunciation, representing exceptions to rules which are of themselves quite involved. In *cuiller* ("spoon"), for instance, the book-rule would indicate a silent *r* and a closed *e;* actually, the *e* is open and the *r* pronounced; in *aiguille* ("needle"), the *u,* which is normally silent in the

gui group, is pronounced; in *second,* the *c* is, very exceptionally, sounded like a *g.*

It has already been stated that whereas written French regularly forms noun-plurals by adding -*s,* this -*s* is generally silent, so that the true spoken-language distinction between singular and plural is normally made in the article (*la femme,* "the woman," is distinguished from *les femmes,* "the women," only by the vowel-sound in *les,* which differs from that of *la*).

The French verb, like the Romance verb in general, has a complex conjugation. The past tenses are particularly numerous. There is an imperfect, used in Romance to denote what was happening or used to happen, in contrast with a past definite which tells what happened, but which spoken French (though not the other Romance tongues) generally avoids in favor of a past indefinite, denoting what happened or has happened. The English past perfect has two Romance counterparts, the distinction between which hinges on complex syntactical factors. The French (and generally the Romance) future and conditional were in origin compound analytical forms, consisting of the present or past of "to have" plus the infinitive, but at a very early date these forms were telescoped together, producing new synthetic forms the analytical origin of which has long since been forgotten by all but linguistic experts. The French passive is formed by means of the verb "to be" and the past participle, as it is in the other Romance languages, but there is widespread avoidance of these forms, which in French are often replaced by *on* with the active (*on parle français ici,* literally "man speaks French here," instead of *le français est parlé ici,* "French is spoken here"). The other western Romance languages prefer a reflexive construction (Spanish *aquí se habla español,* Italian *qui si parla italiano,* "Spanish [or Italian] speaks itself here"). The use of *on* (which originally means "man" and comes from the Latin *homo*) in French is connected by some linguists with the Germanic *man* used in the same function, but it is only fair to point out that *homo* appears in similar connections in the Vulgate about A.D. 400, before the Germanic influence on Latin really began to make itself felt. Four subjunctive tenses, mostly restricted in use to certain types of subordinate clauses, complete the French (and generally the Romance) verb-picture, but in French two of these tenses are widely avoided in the spoken

tongue, while in the other languages they are abundantly, even enthusiastically used.

The French vocabulary of everyday usage is predominantly of Latin origin, though French has perhaps a slightly larger proportion of Germanic words than its sister-tongues, along with a number of Celtic words inherited from the Gauls which the other languages lack. It has been pointed out, with some justification, that French and Italian seem to share those vocabulary innovations which probably arose from the large-city slang of the Roman Empire, while the lateral areas, Spain, Portugal and Rumania, display a more conservative and Classical Latin vocabulary. French and Italian, for instance, share the slang innovation of using *diurnus,* which was originally an adjective meaning "daily," for "day" (French *jour,* Italian *giorno*), while the other languages use the more Classical *dies* (Spanish *dia,* Portuguese *dia,* Rumanian *zi*). But Italian also has *di,* as did Old French (it appears in the modern French names of the days of the week, *lundi, mardi,* etc.). It is possible that the use of some of the reputed archaisms and innovations is rather the result of a later choice.

Spanish, in comparison with French, is a language of relatively simple sounds, few spelling-pronunciation difficulties, and a grammatical pattern which was deliberately regularized by the Spanish Academy. This makes Spanish an ideal beginner's language. It is only after a year or so of study that the true difficulties of Spanish begin to become apparent, and they are mostly of a syntactical type. Spanish word-order, particularly in literary works, is loose, elastic and often arbitrary, whereas the word-order of French, bound into a syntactical strait-jacket by the French Academicians, is a model of clarity. Teachers of Spanish often have to warn their second- and third-year students that in translating a Spanish sentence into English the first thing to do is to go on a fishing expedition for the subject, which may be found anywhere, even at the very end of the sentence.

There are only two or three Spanish sounds which do not have reasonably approximate facsimiles in English, the *j* (or *g* before *e* and *i*), which is pronounced like a strongly aspirated *h,* and the trilled *r* and *rr,* which call for an exercise of the tongue. Spanish spelling, once you have learned a few elementary rules, fits the pronunciation perfectly. The accented syllable is clearly indicated. The elementary

grammatical structure is, if anything, simpler than that of French. In French, as in German and Italian, some active but intransitive verbs are conjugated with "to be," but in Spanish, as in English, all active verbs are conjugated with "to have." The personal endings of the various tenses are quite distinct, permitting one to omit the subject pronoun. A few complexities are offered by the presence of two verbs that mean "to be" and two that mean "to have," but the choice is regulated by very simple rules. The varieties of pronunciation and vocabulary appearing in the Spanish-speaking countries of the Western Hemisphere are not so great but that an intelligent person who has studied the official Castilian cannot become accustomed in two weeks to whichever one he may be exposed to. The basic Spanish vocabulary is essentially Latin, with a certain proportion of borrowings from Basque, Arabic and Germanic. Words ending in *-arro, -orro, -urro,* as well as words like *izquierdo* ("left"), *manteca* ("grease"), *vega* ("plain") are of Basque origin, while Arabic words are very often identified by their *al-* prefix.

Portuguese presents a phonology which is second only to French in complexity. Vowels have open or closed sounds when stressed, and are frequently reduced to an indefinite value when unstressed. Portuguese has nasal vowel-sounds which in some ways resemble those of French. The palatal sounds indicated by English *sh* or the *s* of "measure," which are never heard in modern Spanish, are frequent in Portuguese. The spelling of Portuguese is of the constantly changing variety. Every few years, Portuguese and Brazilian academicians go into a huddle over the matter of spelling and emerge with a number of reforms, which in theory are applicable to both countries, but in practice often show a considerable time-lag in one or the other. The result is somewhat confusing, and reminds one of the fluctuating status of the official Norwegian language, which has undergone at least four noteworthy revisions within the last century. Upon completing, with the help of a distinguished Portuguese colleague, a brief outline of the Portuguese language some years ago, I flattered myself that I had used the very latest official orthography, in accordance with the rules established by mutual agreement between the two Portuguese-speaking countries in 1943. Just as the book was going to press, my good Portuguese mentor rushed up breathlessly to inform me that the rules had

been changed once more, and were we still in time to catch the edition and bring it up to date?

Both in structure and in vocabulary Portuguese shows strong traces of archaism. Whereas in the other Romance languages the future and conditional have been telescoped into an indivisible whole, in Portuguese it is still possible to break them up into their original component parts, the infinitive and the verb "to have" (*chamarei,* "I shall call," but *chamá-lo-ei,* "I shall call him," etymologically "to call-him-I have"). Portuguese retains a future and future perfect subjunctive, which Spanish once had but has long since discarded. Portuguese has a personalized infinitive (*parti depois de terem falado,* "I left after they had spoken," literally "I left after to-have-they spoken"). Object pronouns, which in medieval French, Spanish and Italian could not be placed before the verb at the very beginning of the sentence, still must follow that archaic rule in Portuguese (Spanish *le hablo,* Italian *gli parlo,* but Portuguese *falo-lhe,* "I speak to him").

The Portuguese vocabulary is generally close to that of Spanish, but there are occasional striking differences. "Window" is *ventana* in Spanish, but *janela* in Portuguese; "to eat" is *comer* in Spanish, but *jantar* in Portuguese. The story goes that a Portuguese professor, incensed at the constant reiteration of an American colleague that anyone who knows Spanish can read Portuguese, composed a letter in which not one of the words was identifiable to his Spanish-speaking friend, with the exception of a few pronouns and prepositions. The Brazilians in particular are very touchy about being linguistically lumped with their Spanish-speaking neighbors, and haughtily inform Americans who try to use Spanish with them that they would rather converse in English.

Italian is a tongue of smooth sounds and comparatively easy spelling. Of particular interest in Italian phonology is the very frequent occurrence of double consonants. These become easy to pronounce when one remembers that what is orthographically a double consonant (like *tt* in *fatto*) is phonetically simply the holding of the breath for a fraction of a second before one releases the consonant-sound. One grave stumbling-block in Italian pronunciation is the fact that the learner has no clear-cut indication, as he has in Spanish, of the syllable on which the accent falls. The result is constant mispronunciation of

Italian words and names by Americans who think all Italian words are stressed on the next to the last syllable. During the war, American newcasters insisted on pronouncing as *Ra-PI-do* the name of an Italian river that should be pronounced *RA-pi-do*. In like manner, Judge PE-co-ra's name becomes Pe-CO-ra, Es-PO-si-to becomes Es-po-SI-to, etc.

The fact that Italian uses vocalic endings for practically all its words and seldom has difficult consonant clusters within a word renders the language ideal for singing purposes and for certain types of declamation. But all is not gold that glitters; a word like *sdraiarsi* ("to lie down") presents its own peculiar difficulties to an English speaker.

Italian syntax outstrips Spanish in possessing a certain quality of looseness which, while it makes for elasticity and expressiveness, is often bewildering to the learner. In French, for example, "I don't think that he will come" is *je ne crois pas qu'il vienne,* with an obligatory subjunctive in the subordinate clause. In Italian one has the choice between *non credo che venga,* with the subjunctive, and *non credo che verrà,* with the future indicative. But there is just a trifling shade of difference between the two expressions, perceptible only to a native. The rules for the agreement of the past participle in French are quite arbitrary, even unreasonable, but definitely fixed. In Italian the same rules are delightfully vague. Save in one special connection, the participle may or may not agree with the direct object, as the speaker or writer sees fit. Here again the native lets himself be guided by his instinctive sense of fitness, but the foreign learner does not have this linguistic intuition at his disposal.

The Italian vocabulary is perhaps more predominantly Latin than those of the other Romance languages, but Italians are often amazed when one points out to them the relatively large proportion of Germanic words which were brought in by the Ostrogoths and Longobards, and which have become as thoroughly naturalized in Italian as our own Norman-French importations in English. It used to be a joke among linguists that the Fascist Government tried to make the Italians give up *hotel,* which though it has a French appearance is of Latin origin, in favor of *albergo,* which sounds quite Italian but is of Germanic origin; and this not in the name of the Rome-Berlin axis,

which had not yet been created, but in the name of the "purity" of the Italian language!

Despite these borrowings, Italian remains amazingly close to the ancestral tongue, particularly in its learned and literary vocabulary. The story is told of an Italian high school student who, having been assigned to compose a Latin poem, appeared the next day in class and read off some lines of verse which caused the class to titter and the professor to remark caustically: "Perhaps you forgot that the assignment was for a piece of *Latin* poetry?" "My verses *are* Latin, sir!" replied the student in an aggrieved tone. After a careful rereading, the professor was forced to apologize. The verses were perfectly good Latin and, at the same time, perfectly good Italian. This had been achieved by a carefully restricted use of only those Latin forms which have a one hundred per cent correspondence in Italian, of which there are several. Lest my readers think the story is made up, here is the poem:

> *Te saluto, alma Dea, Dea generosa,*
> *O gloria nostra, o veneta regina!*
> *In procelloso turbine funesto*
> *Tu regnasti serena; mille membra*
> *Intrepida prostrasti in pugna acerba;*
> *Per te miser non fui, per te non gemo,*
> *Vivo in pace per te. Regna, o beata!*
> *Regna in prospera sorte, in pompa augusta,*
> *In perpetuo splendore, in aurea sede!*
> *Tu serena, tu placida, tu pia,*
> *Tu benigna, me salva, ama, conserva!*

Last among the Romance languages in speaking population, but most individual in development is Rumanian. Its only difficult sound is the one represented by *â* or *î*, a guttural *i*-sound for which the closest English approximation is the *y* of "rhythm." Rumanian has a postposed article and a double case, nominative-accusative and genitive-dative. *Cal* is "horse," *calul* is "the horse" (subject or object), *calului* is "of" or "to the horse"; *calul vecinului* is "the horse of the neighbor." Rumanian likewise is distinguished from the other Romance languages by the use of the adjective without an ending as an adverb

(the other Romance languages use -*ment* or -*mente* as an adverbial suffix). The Rumanian future is formed not, as in the other tongues, by telescoping the infinitive into the verb "to have," but by using "to want" with the infinitive after it (*voi cântà*, literally "I want to sing," "I shall sing").

The Rumanian language has been subjected in the course of its historical development to strong Slavic influences, deriving partly from geographical proximity, partly from the fact that the Rumanians adopted the eastern, not the western brand of Christianity. The earliest Rumanian texts (fifteenth century) that have come down to us are written in Cyrillic characters. The Rumanian vocabulary is replete with Slavic infiltrations, but these have for the most part Latin synonyms. "Time," for example, can be expressed either by the originally Latin *timp* or by the originally Slavic *vreme*. The Rumanian exhibit at the Flushing World's Fair contained, among other objects of interest, a life-size picture of a Roman legionary, every part of whose body was described by its Rumanian name; all the names, without exception, were of Latin origin. As the Rumanians say:

> *Mult e dulce și frumoasă*
> *Limba, ce vorbim.*
> (Very sweet and beautiful is
> The language that we speak)

Multum est dulcis sic formosa lingua quam verbamus would be the equivalent in the Vulgar Latin of Dacia. Whatever the Slavic infiltrations may be, Rumanian is a worthy Latin sister of the Romance languages of the west.

The same type of fundamental unity that underlies the Germanic tongues also characterizes Latin and Romance. "Good bread" is *bonus panis* in Latin, *bon pain* in French, *buen pan* in Spanish, *buon pane* in Italian, *bom pão* in Portuguese, *bun pâine* in Rumanian. "One thousand" is *mille* in Latin, French and Italian, *mil* in Spanish and Portuguese, *mie* in Rumanian.

The spoken language of Rome lives on, not only in the foreign tongues which, like English, have adopted it in part and adapted it to their modern needs, but also in its numerous and picturesquely diversified direct descendants. While our civilization endures, it will never die.

THE SLAVIC LANGUAGES

The Russian is strong on three foundations: "perhaps," "never mind," and "somehow."—Russian proverb

The Slavic languages comprise a speaking population of over two hundred million, of whom almost three-fourths are concentrated on Soviet soil. Speakers of "Great Russian" number over one hundred million, Ukrainian speakers some thirty-five million, and White Russian speakers about eight million.

Outside the Soviet Union, Polish speakers number between twenty-five and thirty million, speakers of Czech and Slovak between ten and twelve million. Approximately twelve million of Yugoslavia's sixteen million inhabitants use Serbo-Croatian, and nearly two million more Slovenian, while Bulgarian is the language of about seven million people. A small group of about 150,000 spoke Wendish, or Lusatian, in the region of Cottbus and Bautzen in east central Germany, but they were entirely surrounded by German speakers, and it is reported that not many survived Hitler's persecutions.

In comparison with the Germanic and Romance tongues, the Slavic languages present a conservative, archaic aspect, close to what seems to have been the original Indo-European state of affairs. There is a considerable spread between Gothic, earliest of the Germanic tongues on record, and modern English or German, or between Latin and modern French or Spanish. There is no such divergence between the modern tongues of the Slavic group and the earliest of their number, the so-called Old Church Slavonic or Old Bulgarian of the ninth century, concerning the original location of whose speakers there is some difference of opinion, some linguists holding that this tongue was spoken in Macedonia, others placing it as far north as Moravia in Czech-

oslovakia. The process of transition from a synthetic to an analytical structure, so apparent in the other two great western groups of Indo-European, is largely non-existent in Slavic.

The phonology and structure of the Slavic languages will become apparent as we discuss the various languages of the family, notably Russian. Suffice it here to say that with the single exception of modern Bulgarian, the Slavic languages retain a full inflectional morphology for nouns, adjectives and pronouns, with seven of the eight original Indo-European cases (nominative, genitive, dative, accusative, vocative, instrumental and locative), while the verb-system retains the ancient aspects, perfective and imperfective, one indicating an action as carried through, completed or instantaneous, the other showing the action as occurring continuously or repeatedly.

The Slavic languages possess a wealth of consonant-sounds, including a full series of palatals (*ch, j, sh, zh,* etc.). One of the main points of difference among them is the place of the stress. Polish invariably stresses the next to the last syllable of the word, Czech and Slovak the initial, Serbo-Croatian usually the initial, while in Russian, Ukrainian and Bulgarian the place of the accent is unpredictable. Czech and Slovak distinguish carefully between long and short vowels, while the other languages make no such careful distinction; in Russian and Ukrainian, however, the stressed vowel is often prolonged, while unstressed vowels tend to become indistinct in pronunciation. Polish keeps two nasal vowels, somewhat similar in sound to French *on* and *in,* which Old Church Slavonic also had, but which the other languages have turned into simple vowels or diphthongs.

The Slavic peoples who received Christianity directly or indirectly from Byzantium (Russians, Ukrainians, Serbs, Bulgars) adopted the Cyrillic alphabet, while those who became Roman Catholics (Poles, Czechs, Slovaks, Croats, Slovenes) use the Roman characters. This gives the Slavic languages a diversity in written appearance which does not correspond to their comparative closeness in spoken form. A Czech, a Pole, a Russian and a Serb, each speaking his own tongue, manage to achieve a measure of mutual understanding which could never be duplicated by an Englishman, a German, a Hollander and a Swede, or by a Frenchman, a Spaniard, a Portuguese and a Rumanian. "Good evening" is *dobry vyecher* in Russian, *dobry wieczór* in Polish,

dobrý večer in Czech, *dobra večer* in Serbo-Croatian and Bulgarian. "To your health!" is *na zdorovye, na zdrowie, na zdravie* or *nazdar* in the first three tongues, *u vaše zdravlje* in Serbo-Croatian. "Land" and "sea" are *zemlya* and *morye* in Russian, *ziemia* and *morze* in Polish, *země* and *moře* in Czech, *zemlja* and *more* in Serbo-Croatian, *zemya* and *more* in Bulgarian. The identical word, *sto,* does service for "hundred" in all five languages.

Official Russian, or "Great Russian" (in contradistinction to "Little Russian," or Ukrainian) accounting for over half of all Slavic speakers, is also the predominant tongue of the Soviet Union, a country which looms large in post-war international affairs, to the point of being pronounced one of the two dominating factors in the world's immediate future. This present role of the Soviet Union has had as a by-product in America a widespread interest in the Russian language, a tongue that is strangely beautiful, piquantly intricate, and that now challenges the primacy of long-established tongues like German and French.

It must, however, be remembered that out of the Soviet Union's estimated two hundred million inhabitants, only about half use Russian as their native tongue. The rest speak at least 145 different languages, including closely related Slavic tongues like Ukrainian, White Russian and Polish, more distantly related Baltic tongues like Lithuanian and Lettish, distant Indo-European relatives like Armenian and the Moldavian variety of Rumanian, Caucasian languages like Georgian, Circassian, Lesghian and Avar, and an infinity of Ural-Altaic languages such as Finnish, with the closely related Karelian and Estonian, Lapp, Cheremiss, Votyak, Ostyak, Tatar, Kirghiz, Turcoman, Uzbek, Kalmuk, Buryat, Tungus and Samoyed, even languages concerning whose affiliations practically nothing is known, like Yukagir. Each of the sixteen Soviet Republics has its own language, which is semi-official, while the term *sovyetsky* ("pertaining to the Soviet Union") is not interchangeable with *russky* ("Russian"), and is never applied to the language.

The Soviet Government does not compel its two hundred million citizens to speak Russian, but on the contrary encourages and helps them to speak, read and write their 145 major and minor tongues, even devising some fifty alphabets for language groups that previously had no written language. It was recently announced that Stalin's *Short*

Course in the History of the Communist Party of the Soviet Union had been translated into no less than sixty-one of the languages of the Soviet Union, as well as sixteen non-Soviet tongues. This policy of linguistic and cultural liberalism of the Soviet rulers reminds us that Leibniz, at the end of the seventeenth century, urged Peter the Great to do what the Soviets did later—order studies to be made of the languages of the Russian Empire, reduce these languages to writing, and make dictionaries for them.

In recent years, the originally scanty populations of Asiatic Russia, largely nomadic and speaking languages of the Turkic stock, have been joined by millions of Russian speakers from Europe who have given their own distinctive tone to the new civilization that is springing up in northern Asia. The spreading of the Russian tongue into Siberia, even under the Tsars, had generally followed the course of the Transiberian Railway, with larger groupings along the intersecting courses of the three great rivers, Lena, Ob and Yenisei, as well as in the extreme east, in the region of Vladivostok, and this movement continued and expanded in recent years.

Furthermore, despite the lack of linguistic compulsion, some twenty million inhabitants of the Soviet Union were estimated to have learned Russian between 1926 and 1940. Russian is described as the "binding" tongue of the Soviet Union, and it is doubtful if any of the Union's inhabitants fail to realize that it is the language that pays dividends in terms of political and economic preferment.

To a person with English language-habits, Russian is difficult, but not insurmountably so. What the Tatars and Kalmuks and Kazakhs and Usbeks can do, Americans and Englishmen can do.

The first obstacle, and the one that often terrifies beginners, is the Russian system of writing, a sensible and fairly phonetic one, but one that differs from ours. It fascinated me when I used to collect stamps as a boy. Some of the letters were (or seemed to be) exactly like ours; others were peculiarly different. Later I learned that alphabet and its history: how two Greek bishops, Cyril and Methodius, left the city of Constantinople in the ninth century to bring Christianity to the heathen Slavs, who had not yet developed a satisfactory system of writing, and painstakingly constructed an alphabet for them at the same time that they taught them the Gospel.

Today the Russian thirty-two-letter alphabet is practically the same as the one devised by the bishops. Fittingly, it is called Cyrillic, after one of its inventors. It serves a population of nearly 150 million Russians, Ukrainians and White Russians on Soviet soil, and with minor variations is used by the Serbs and Bulgars.

In the Russian variety of the Cyrillic alphabet a few characters have the same form and approximately the same value as in our own: *A, E, K, M, O, T.* Others are misleading: *B* is not "b," but "v"; *H* is not "h," but "n"; *P* is not "p," but "r"; *C* is not "c," but "s"; *X* is not "x," but "kh." The Greek gamma, pi, upsilon and phi (Γ,Π,Υ,Φ) appear with the values of hard *g, p, oo* and *f,* respectively. Greek zeta, delta, lambda (Z,Δ,Λ) are slightly modified in form, (З,Д,Л) but unchanged in value. Two characters, the soft *i* and the *ya,* look like our *N* and *R* facing the other way (И,Я). Then there are fancy characters, which give the alphabet its air of strangeness. Something that has been described as "two K's back to back," but which looks more like a reversible tripod, (Ж) represents the sound of *zh,* or *s* in "measure." A handwritten figure "4" is the *ch* of "church" (Ч); a rectangle with open top and a little vertical bar at the lower right corner is *ts* (Ц); two rectangles with open tops give the sound of *sh* (Ш), while if the little vertical bar at the lower right is added we get *shch* (Щ), as in "fresh cheese"; a character resembling a small printed *b* (Ь) serves to soften or palatalize a preceding consonant, but if it appears followed by a capital *I* (Ы), the sound is that of a throaty *ee; I* and *O,* joined together by a small horizontal bar, give *yoo* (Ю). This means that a word like *vino* ("wine"), will appear as *BИHO* (with the *N* reversed); *nos* ("nose") will look like *HOC;* and *Rossiya* ("Russia"), like *POCCNR* (with *N* and *R* reversed).

Once the alphabet hurdle is taken, the real difficulties begin. The Russian vocabulary is predominantly Slavic, which means that it is related, but not too closely, to the three great language-groups that go to make up our English vocabulary, the Germanic, the Latin-Romance and the Greek. To cite a few examples of this kinship: the Russian word for "house," *dom,* is easily recognizable as akin to the Latin *domus,* from which we have gotten "dome" and "domicile." The Russian verb "to give," *dat',* is the Latin *dare;* the Russian verb "to see," *vidyet',* is the Latin *videre,* from which we get "visible" and

"video," and is less obviously related to English "wit" and "wot" and to German *wissen* ("to know"). *Yabloko* is, distantly, our "apple"; *snyeg* is our "snow"; *khlyeb* means "bread" and is connected with our "loaf," which was at one time *hlaif*. *Ogon'*, the Russian word for "fire," is related to Latin *ignis*, whence our "ignite" and "ignition"; *nyebo*, related to our "nebulous" and "nebula," is "sky." *Moloko* is our "milk," *boroda* our "beard," *lyubov'* our "love," *dyen'* our "day" and *noch'* our "night." *Brov'* is our "brow," and *novy* is the Latin *novus* and the English "new." *Solntse* is "sun," *luna* is "moon," *svinya* is "swine" and *mysh* is "mouse." *Korotky* is the Latin *curtus* from which we get "curt," and *myortvy* (compare "mortal") is "dead."

Nowhere does the relationship stand out more clearly than in nouns of relationship. *Mat'*, which changes to *mater-* in most case-forms, is common to English "mother," Latin *mater* and Greek *meter*. *Brat* (once *bratr*) is "brother"; *sestra* is "sister"; *syn* is "son"; *doch'* (*docher-* in most case-forms) is "daughter."

More numerous than most people think are the Russian words already familiar to Americans. Everyone knows *vodka* (a diminutive form of *voda*, "water," which gives the potent drink the literal translation of "little water"); *tovarishch* (freely translated as "comrade," but originally "merchant's apprentice" or "junior salesman," derived from an originally Turkish word *tovar*, meaning "goods" or "merchandise"; *tovarishch* was at first viewed with suspicion by the Russian peasants, and they frequently prefixed *gospodin*, "Mr.," making a "Mr. Comrade" out of the combination); *Kremlin* (from the root *kreml'*, "citadel" or "fortress"); *Soviet* (the Russian word for "council," referring specifically to the councils of soldiers' and workmen's delegates that ruled Russia after the fall of Kerensky); *kulak* (literally "fist," applied to well-to-do Russian peasants prior to the collectivization of Soviet agriculture). We also know *troika* and *balalaika*, perhaps even *kino* ("movies") from Amkino and Sovkino, and *ochi chyorniye* "black eyes," from a popular song. Then there is the *-grad* or *-gorod* that ends many Russian place-names (Novgorod, Stalingrad) and means "city" or "town." Orel, which our radio announcers sometimes correctly pronounced *Oryol*, means "eagle." *Novaya Zemlya* (the Nova Zembla of our school-days) is "New-land." The *yug-* of Yugoslavia (another Slavic land) is "south," and the *vostok* of Vladivostok is "east." The

bolsh part of Bolshevist is "big"; the Bolshevists were so named because they advocated the big, or maximum program of socialistic reform ("Maximalist" is the literal Latin translation of *Bolshevik*). *Pyatilyetka* is a Soviet five-year plan; the name is derived from *pyat'* ("five") and *lyeto* ("summer" or "year").

Russian has been a great borrower of words from the western languages, Latin, Greek, French, German and English. Here is a series of borrowed words which, while differing slightly in pronunciation, are spelled like their English counterparts: *agent, angel, bank, diplomat, flag, front, general, motor, park, pastor, pilot, port, poet, professor, tank.* In spite of the very slight modification in spelling, the following are easily identified: *avtobus, avtomobil, appetit, aktsent, arest, armiya, atmosfera, arifmetika, adres, atlet, allo!, aeroplan, bagazh, bandazh, bandzho, bifshteks, chek, fakt, fotograf, garazh, ideya, kalendar', kapital, kanal, klub, klass, klimat, kharakter, kofe, lampa, limonad, menyu, metall, metod, muzyka, mekhanik, minuta, natura, nerv, pasport, prezident, produkt, respublika, restoran, rostbif, okean, piknik, serzhant, salat, sekretar, sigara, shkola, soldat, summa, telefon, telegraf, tabak, taksi, teatr, vazelin, zhelatin, zhurnal.*

Some words take a little longer to fathom, chiefly by reason of spelling complications: *byulleten'* ("bulletin"), *gospital'* ("hospital"), *kabel'* ("cable"), *koketka* ("coquette"), *inzhenyer* ("engineer"), *obyekt* ("object"), *pochta* ("mail," "post"), *ris* ("rice"), *reportyor* ("reporter"), *sakhar* ("sugar"), *sup* ("soup"), *shofyor* ("chauffeur"), *tsentr* ("center"), *tsement* ("cement").

Slightly misleading are *dama* ("lady"; French *dame*), *bilet* ("ticket; French *billet*), *moda* ("fashion"; French *mode*), *mayor* ("major"), *medik* ("medical student") and *gimnaziya* ("high school," which is the general European meaning of *gymnasium*).

Russian pronunciation is complicated to an American ear. In addition to a wealth of palatal sounds which recur frequently (*sh, zh, ch, shch, ty, dy, ly, ny*), there is a tough guttural *i*-sound, best produced by shaping the lips for *ee*, then trying to say *oo*. There are also difficult consonant-combinations, like *vstr, vstv, zdr* (try, for example, to pronounce *zdravstvuytye*, which is the common form of greeting, and which the Russians themselves often cut down to *zdrastye*). There are prepositions consisting of a single consonant (*v*, "in," *k*,

"toward," *s*, "with"); the trick here is to link them with the following word, as in *v ogorodye* ("in the garden"); but sometimes the next word begins with an unvoiced consonant, in which case *v* becomes *f* in pronunciation (*v ponyedyelnik*, "on Monday"). In spite of all this, Russian miraculously succeeds in sounding beautiful, with strange words like *ptitsa* and *skazka*, which seem to be taken out of fairy-tales.

Here are a few expressions that are frequently used in ordinary intercourse. The stressed syllable is here indicated by capitals. Russian, which does not have a fixed place for the stress, like Czech or Polish, gives absolutely no indication in written form of the syllable that is to be stressed.

DA—yes
NYET—no
spaSIbo (or *blagodaRYU*)—thank you
poZHALsta—please, don't mention it
KTO?—who?
CHTO?—what?
GDYE?—where?
ZDYES'—here
TAM—there
priYATno—glad to meet you
do sviDAnya—good-bye
SKOL'ko?—how much?
ZAVtra—tomorrow
syeVODnya—today
vcheRA—yesterday
Eto—this
DAYtye mnye—give me
izviNItye—pardon me
KAK vy pozhiVAyetye?—how are you?
Ochen' khoroSHO—very well
poniMAyetye li vy?—do you understand?
YA nye poniMAyu—I don't understand
YA nye ZNAyu—I don't know
govoRItye li vy po-anGLIsky?—do you speak English?
govoRItye MYEDlyennyeye—speak more slowly

While learning phrases, one should not forget *nicheVO,* which is to the Russian what a shrug of the shoulders is to a Frenchman: "don't know," "can't help it," "nothing to be done about it."

Many Russian expressions are picturesque when literally translated: "railroad" is "iron road"; "fountain-pen" is "self-writing pen"; and (though we of the capitalist countries are supposed to be the rugged individualists) "to learn" is "to teach oneself."

There are picturesque sentences, too; when someone thanks you, you may reply: "Not for that!" You don't say, "I have a book," but "There is by me a book." Instead of: "How old are you?," you ask: "How much to you of years?" Some Russian sentences are telegraphic in style: "You here long?" does service for "How long have you been here?"

In spots, the Russian mind runs in different channels from ours. The same word is used, as it was once in English, for "moon" and "month." A single word is used for "Sunday" and "resurrection." You cannot say: "It's raining," "It's snowing"; what you say is: "Rain comes," "Snow comes." You may say: "I'm hungry" (though the more common expression is: "To me wants itself to eat"), but not "I'm thirsty" or "I'm sleepy"; it is: "I want to drink," "I want to sleep."

Like most Americans, Russians have three names. The middle name, however, is what the ancients called a patronymic—a designation of one's father. Thus, Ivan Nikolayevich Kerensky means, John, son of Nicholas, Kerensky. Both patronymic and family name change according to the sex of the owner. Ivan Nikolayevich Kerensky's sister would be Nadyezhda (or Tatyana, or Yekaterina) Nikolayevna Kerenskaya. The common family-name ending *-off (-ov), -eff (-ev)* becomes *-ova, -eva* in the feminine, which means that Molotoff's wife is Mrs. *Molotova.*

There are words in Russian for "Sir" or "Mr.," "Madam," "Mrs.," "Miss," but under the Soviets it is no longer the custom to use them, save for foreigners. What is used instead is "comrade" (*tovarishch*), "citizen" (*grazhdanin*) and "citizeness" (*grazhdanka*).

Russians have a sense of humor and a sense of poetry, and display both in everyday conversation. One frequent reply to "How are things?" rhymes with the question and means "as nice as soot is white."

Russian grammar is quite involved for an English-speaking learner,

though probably no more so than the grammar of Latin, which is studied by thousands of our high school students.

There are no articles, definite or indefinite, in Russian. *Zhena* means "woman," "a woman," "the woman." That is why Russians and other Slavs take such picturesque liberties with our "an," "a" and "the." There are three genders, masculine, feminine and neuter, but inanimate objects do not necessarily belong to the neuter gender. On the other hand, the ending of a noun generally gives some clue to the gender. Consonant-endings are mostly masculine, *-a* endings feminine, and *-e* or *-o* endings neuter.

Russian has six cases (nominative, genitive, dative, accusative, instrumental, locative), with an occasional extra vocative form. This means a continual shift of endings, as indicated by the following phrases: *ofitser zdyes'* ("the officer(is)here"); *kaska ofitsera* ("the helmet of the officer"); *daytye pis'mo ofitseru* ("give the letter to the officer"); *ya vizhu ofitsera* ("I see the officer"); *ya byl s ofitserom* ("I was with the officer"); *ya govoryu ob ofitserye* ("I am speaking about the officer"). This process is repeated in the plural, with a different set of endings; and when one considers that there are several distinct declensional types of masculine nouns, of feminine nouns and of neuter nouns, one readily perceives the strain on the learner's memory, if the learning is done out of a text-book. To the natives, of course, there is no strain, since each form is learned automatically in given contexts from early childhood. An illiterate Russian will correct you if you make a mistake in a case-ending, though he may be unable to cite the grammatical rule or, for that matter, the names of the cases.

Adjectives also have case-forms and case-endings, which differ from those of the nouns. The adjective used after the verb "to be" is given a special distinctive form which, while it appears in only one case, the nominative, nevertheless changes for gender and number. Even numerals are declined. An additional complication affecting the numerals is that you say "one house," but "two," "three" or "four" "of house," then, from five on, "of houses."

In the verb-scheme, Russian leaves out the present of "to be," but not the past or future. *Ya ofitser* means "I (am) an officer," but "I was" and "I shall be" are translated (*byl, budu*). There are only three tenses, present, past and future, but verbs usually go in pairs, one im-

perfective (like *pisat'*, denoting the action as habitual or repeated: "I was writing," "I used to write," "I shall be writing," "I write habitually or repeatedly"), the other perfective (like *napisat'*, denoting the action as occurring once and then being over: "I wrote," "I shall write").

If one would inquire into the reason for this seemingly complicated structure, the answer is that Russian, like Latin and Greek and, to a lesser degree, German, is simply more conservative of the old Indo-European structure than are tongues like English, French or Spanish. But just as French and Spanish were once Latin, so English was at one time Anglo-Saxon, with a structure similar to that of modern Russian. It is a case of one brother letting his beard grow while the other shaves it off.

Anyone having the patience to study Russian will have many rewards at his disposal: in the first place, a tongue current over one-sixth of the earth's land surface, serving, directly or indirectly, a Eurasiatic population of over two hundred million; secondly, the vehicle of one of the world's richest and most beautiful literatures; thirdly, the key to a new culture and system of life with which we must either fight for survival or learn to live side by side; fourthly, a thoroughly modern insight into the ancient structure of all the lan-. guages of our great Indo-European family—Sanskrit, Latin, Greek, Anglo-Saxon, Germanic, Celtic; lastly, an excellent introduction to all the languages of the Slavic group of Indo-European, and a rapid means of communication with their speakers.

Just how close is the relationship between Russian and the other Slavic tongues can be gauged by comparing the one with the others.

Ukrainian and White Russian are close enough to Great Russian to be described as variants of the latter. Together, the three Russian languages are sometimes said to form the eastern branch of Slavic.

Polish, Czech, Slovak and Wendish are classified together in a northwestern group. All use the Roman alphabet, but since the twenty-six bare letters of this are quite insufficient to represent the Slavic sounds, many diacritic marks were evolved to distinguish between two or more phonetic values of the same letter. Polish, in addition, evolved consonant-combinations some of which look quite strange, though the sounds they represent are not unpronounceable.

Polish places hooks under *a* and *e* to represent the nasal values of

o and *e*, which it alone retains among the Slavic tongues. Accents and dots over consonants like *c, n, s, z,* indicate palatalized pronunciations. A bar through an *l* shows the lateral sound of *l* in "milk," while if the *l* does not have the bar, the sound comes closer to *lli* of "million." Combinations like *cz, dź, sz, rz, szcz* indicate sounds similar to English *ch, j, sh, shch. W* is sounded as *v.*

The Polish system of noun, adjective and pronoun declension and verb-conjugation is quite close to the Russian, and many endings are almost identical. The Polish system of penultimate accentuation confers upon the language a majestic, flowing rhythm which distinguishes it on the one hand from Russian, with its heavy stress and slurred unaccented vowels, on the other from Czech, with its staccato, machine-gun-like initial accent.

Czech prefers in the matter of orthography a series of hooks over certain consonants (*c, d, n, r, s, t, z*) to indicate palatalized pronunciation. One of the toughest sounds in any language to a person who does not grow up with it is the *r* with a hook over it, which indicates a blending of the trilled *r* of Spanish or Italian with the *s* of "measure," pronounced simultaneously. Written accents over Czech vowels indicate not stress, which is always initial, but length, and it is perfectly possible in Czech to have in the same word a short accented and a long unaccented vowel (in *dobrý*, for instance, the *o* is stressed but short, the *ý* unstressed but long); this makes Czech an ideal living language in which to study the same phenomenon occurring in Classical languages like Greek and Latin. In structure, Czech greatly resembles Russian and Polish, and many of the case- and verb-endings are almost identical.

Slovak may be described as a variant of Czech, or perhaps to an even greater degree as a bridge between Czech and Polish. Because of its central position among the Slavic tongues, Slovak has at times been advocated as a mediating language, or tongue of common intercourse among all Slavs. The point is well taken, for it is closer than Czech to the South Slavic languages, and close enough to the East Slavic tongues, particularly Ukrainian, to serve as an intermediary.

Serbo-Croatian, Slovenian and Bulgarian are often classified as South Slavic tongues, in opposition to the eastern (Russo-Ukrainian) and to the northwestern (Polish-Czech) divisions. This classification is perhaps more geographical than linguistic, because while Serbo-

Croatian and Slovenian follow the general Slavic pattern, Bulgarian displays such radical structural differences as to warrant a separate classification for itself.

Serbian and Croatian are the same language, with minor dialectal differences. The main point of divergence between them is the writing, Serbian using the Cyrillic, Croatian the Roman alphabet. Serbo-Croatian is more musical than the other Slavic languages, having preserved in certain words traces of the ancient Indo-European musical pitch-accent. Its system of inflections parallels to a considerable degree that of the languages already described. Slovenian may be called a variant of Serbo-Croatian.

Bulgarian, however, differs widely from all other Slav tongues in two important particulars. It has a fully developed definite article, which the others lack, and which is postposed, like the definite article of Scandinavian and Rumanian; and it has reduced the numerous case-forms of Slavic to a single case. This means that while Russian and Bulgarian both use *selo* for "village," Russian will say *selo* for "the village," but Bulgarian will say *selo-to*. On the other hand, Russian will decline *selo* in six cases, while Bulgarian will express case-relations by means of position and prepositions, like English.

Many theories have been advanced for the structural diversity between Bulgarian and the other Slavic tongues. One is to the effect that the Bulgars were not originally Slavs, but speakers of a Turkic language who adopted Slavic speech and found the Slavic cases too complicated for use. This hardly seems a satisfactory explanation, as the Turkic languages use plenty of inflectional endings, more, in fact, than Slavic itself. For the use of the postposed article, it has been suggested that proximity to Rumanian may be responsible. But Bulgarian uses as an article the word which in other Slavic languages is a demonstrative pronoun, meaning "this" or "that." Had the use of the article been borrowed from Rumanian, it is possible that the Rumanian form itself would have been borrowed. Other linguists suggest that it may have been Rumanian that borrowed the postposed article from Bulgarian. If Scandinavia were territorially contiguous with Rumania and Bulgaria, instead of being separated by broad expanses of languages that do not use a postposed article, our linguists would undoubtedly claim an influence from the Scandinavian languages upon

the Balkan ones, or vice-versa. The real fact of the matter seems to be that languages often develop parallel traits in phonology, morphology and syntax without the necessity of a direct influence by one upon the other. It is quite possible that the Bulgarian reduction of the Slavic cases to a single form paralleling the experience of the western Romance languages is another case of this stray similarity, and that the Bulgars are as much Slavs as any of the other Slavic nations. The occasional traces of ancient case-forms, particularly the vocative, appearing in modern Bulgarian, and the fact that Old Church Slavic was probably spoken in what is today in great part Bulgarian territory would seem to bear out this view.

The Slavic picture would hardly be complete without a reference to the tongues of the Baltic group, which are often linked with the Slavic in a Balto-Slavic subdivision of Indo-European. Today only two Baltic tongues remain, Lithuanian and Lettish, and together they do not reach five million speakers. During the Middle Ages there was also an Old Prussian tongue, but its speakers were practically exterminated by the Teutonic Knights. Lithuanian enjoys the distinction of being described by linguists as the modern tongue which comes closest to the original Indo-European of all the modern languages of the group. It retains practically all of the Indo-European inflections, and a measure of the old Indo-European pitch accent.

It is a fact, though not perhaps as universally known as it might be, that speakers of Balto-Slavic languages and their descendants are quite numerous in the United States and Canada. It has been estimated by reliable sources that no less than three million Polish speakers and their descendants are located on U.S. soil, along with two million original speakers of Czech and Slovak and close to half a million each of Yugoslavs and Lithuanians. Russians and Ukrainians, though less numerous, still have furnished a sizable contingent to our population. These original Slavic speakers, while mostly concentrated in the mining and industrial districts of Pennsylvania, Ohio, Illinois and Michigan, are to be found today in practically every State in the Union. Their attachment to their mother-tongues is attested by the large number of parochial elementary schools in which these tongues, particularly Polish, are taught.

OTHER INDO-EUROPEAN LANGUAGES

"But, for my own part, it was Greek to me."—Shakespeare, *Julius Caesar*

The three great branches of Indo-European (Germanic, Romance, Balto-Slavic) have at least five existing relatives, of which one, Indo-Iranian, is as numerically extensive as they. The other four (Greek, Albanian, Armenian, Celtic) are today quite insignificant as to number of speakers, but two of them have in past centuries exerted a decisive influence over the destinies of western culture.

Greek is today the tongue of perhaps eight million speakers, located in Greece, the islands of the Aegean, southern Albania and Yugoslavia, southwestern Bulgaria, and European and Asiatic Turkey, as well as on the islands of Cyprus and Crete. It was at one time the tongue of common intercourse of the central and eastern Mediterranean, most of Asia Minor and parts of Egypt, the language of the old Greek city-states whose colonies ranged from Spain and southern Gaul, Sicily and the coast of Italy to the shores of the Black Sea and beyond. Greek was the first of the western Indo-European tongues to become the vehicle of a distinctive civilization which endures to this day. It was the language of philosophy, of poetry, of literature, of rhetoric, of science when the other tongues of the west, Germanic, Slavic, even Latin, were unwritten dialects. It was the Greek form of the alphabet, brought originally from Phoenicia, that gave rise to the Etruscan and Roman alphabets, whence all our western scripts are derived. As the direct ancestor of the Cyrillic alphabet, the Greek form of writing also gave rise to the written characters of the eastern Slavs.

Greek was the one foreign tongue the Romans respected. Ruthless as they were with all other foreign languages, at no time did they

attempt to supplant Greek where they found it. As a result, Greek and Latin lived in a state of symbiosis under the late Republic and the early Empire, with Greek used as a popular language in most of the eastern provinces. When the seat of the Empire was transferred from Rome to Byzantium, the official language of the eastern Empire was Greek, and while the Roman Empire of the West fell in the fifth century, the Byzantine Empire continued to exist until the fall of Constantinople to the Turks in the middle of the fifteenth century.

The transformations that have occurred in the Greek language from about 800 B.C., when it first appeared in the Homeric poems, to the present day, are astoundingly slight, particularly in the written form of the language. Greek high school students today can read the *Iliad* and *Odyssey* without much difficulty.

The Greek of antiquity was a language of many dialects—Attic, Doric, Ionian, Aeolian, etc. While these did not differ too greatly, and there was undoubtedly a community of understanding among their speakers, some of the ancient dialectal forms show striking individual traits. By the time Greece came in contact with Rome, Greek speakers had developed a *koine*, or tongue of common intercourse, which did service for all of them, and the ancient dialects gradually dropped into disuse. Only one, the Laconian of Sparta, survives to the present day in the form of the modern Tsaconian. The *koine* alone served the medieval Byzantine Empire.

Between the schism that separated the eastern and western churches and the fall of Constantinople to the Turks in 1453, the study of Greek in western Europe, which had flourished when Roman power was at its peak, declined to the point where the famous saying "It's Greek to me" came into being (actually, the expression seems to be a translation of a phrase with which western monks annotated Greek passages in their religious manuscripts: *Graecum est, non legitur*, "It is Greek, it is not read"; but at the outset this phrasing seems to have referred to the possibility of heretical statements in the Greek texts rather than to difficulty with the language).

The taking of Constantinople saw the downfall of Greek on its own ancient territory, since it was replaced by Turkish in the Balkans and Asia Minor, and became thenceforth merely the tongue of a peasant population in the Greek peninsula and adjoining islands; at the

same time, this event marked also the resurgence of Greek in the west. Brought to Italy by Byzantine refugee scholars, the Greek language and Greek literature aroused a new interest in the lands of the Renaissance, and the west was suddenly reminded of the tremendous debt it owed Greece. Greek became once more the great language of scholarship, even while it was declining into an almost illiterate tongue on its own home soil. For the last four and a half centuries, Greek has again been contributing mightily to the languages of the civilized western world, supplying them with terms of learning, science, technology, and all the myriad activities in which the Greeks once showed the way.

After the liberation of Greece from Turkish rule in the early nineteenth century, the spoken Greek tongue regained a small measure of its former splendor. The modern official Greek language, called Romaic (a reminder of the Roman Empire of the East) has two forms: one, used in literary composition, called *katharevusa,* which is very close to the ancient tongue of Homer and Aristotle; the other, a popular spoken tongue, called *demotike,* which has borrowed considerably from foreign sources, particularly Turkish, and shows a certain measure of simplification of some of the old grammatical forms.

Yet in both the present-day Greek languages, literary and popular, there is an undercurrent of archaism which is most noticeable in the vocabulary. The spoken Greek tongue is replete with words which we use in the more cultured portion of our own vocabulary. The modern Greek word for "army," *stratevma,* comes from the same root that gives us "strategy." "I count" in modern Greek is *arithmo;* the link with "arithmetic" is clear. "Bad" is *kakos,* and "sound" is *phone,* which makes the origin and meaning of "cacophony" quite comprehensible. *Psyche* is "soul" or "mind," and *soma* is "body," and "psychosomatic" medicine is thereby defined.

The Greek alphabet is still precisely the same as it was in the days of Demosthenes, and our Greek-letter fraternities have made us partly familiar with it. "Beta" and "gamma" rays, the "delta" at the mouth of a river, the "iota" which indicates a minute quantity, the "pi" of mathematics, expressions like "from alpha to omega" have also acquainted us with the names of the letters.

The phonology of Greek has changed somewhat from the days of old, but to a lesser degree, perhaps, than the phonology of the Romance

languages from Latin. The letter *beta* is no longer pronounced as *b*, but as *v*, so likewise the ancient *upsilon* in diphthongs, so that the *autos* from which the front part of our "automobile" is derived is today sounded *avtos* or *aftos* on Greek soil. Many vowels and diphthongs have altered their values. The ancient accentuation of Greek, which contained elements of musical pitch, has turned into an accent of stress. The old rough breathing which we still pronounce as *h* has become silent, so that while we pronounce "hypnotism," a modern Greek pronouncing *hypnos* ("sleep") will say *ypnos*.

Ancient Greek differed from Latin in possessing a definite article, and modern Greek still has it. *Anthropos* is "man," but "the man" is *o anthropos*. The ancient Greek cases (nominative, genitive, dative, accusative, vocative) still exist, but there is a tendency in the spoken tongue to discard the dative to mark the indirect object and use instead the accusative with *eis*, "to," "into."

The Greek verb still has all the complexities of person, number, tense, voice and mood that appeared in the older language, with new ramifications brought about by the use of analytical compounds (similar to the English "I have brought") which did not succeed in displacing the old synthetic forms, but only in making a place for themselves by their side. In ancient Greek, for example, a form like "I shall loose" was expressed simply by *lyso;* today one may use *lyso, tha lyso,* or *tha lyo,* all with different shades of meaning. Modern Greek has, however, discarded the old dual number.

A few samples of the spoken Greek tongue of today will make clear the intimate bond that exists between it and our own language in its more cultured reaches. "Thank you very much" is *evcharisto para poly,* where the first word, "I thank," gives us the key to "eucharistic," *para* ("by") is the preposition that appears in such English compounds as "paranoic," and *poly* ("much," "many") supplies us with the prefix of "polytheism," "polyglot," etc. "I am thirsty" is *dipso,* which appears in our "dipsomaniac." "Do you speak Greek?" is *omileite Ellenika,* where the first word reminds us of the religious "homily" (merely a "talk"; "sermon" is its precise Latin counterpart). "Very little" is *poly oligon,* and we recognize the second word in "oligarchy," the rule of the few. "So long" is freely translated by an expression that sounds like *yasoo,* but which in full written form ap-

pears as *hygeia sou* ("health to you"); needless to say, *hygeia* gives us "hygiene."

Eureka is the State motto of California. It is a Greek verb-form meaning "I have found," a perfect slogan for seekers after an ideal climate who happen to stray into the Golden State. The expression, however, had gotten into the western languages because of its real or legendary use by Archimedes on an occasion when the solution to an involved problem came to him while he was in the bath-tub; the story goes that he ran out into the street just as he was, shouting: *"Eureka! I've got it!,"* much to the scandal of passers-by.

The Albanians are often closely linked with the Greeks, but the main bond is geographical rather than racial or linguistic. The best hypothesis concerning the racial stock of the Albanians is that they are the descendants of the ancient Illyrians who once occupied the entire eastern coast of the Adriatic and formed the bands of Liburnian pirates who on one occasion held even Julius Caesar for ransom. Linguistically, Albanian was at one time thought to be a dialect of Greek, but it is today regarded as a separate branch of Indo-European, with plenty of words borrowed from Greek, Latin, Slavic and Turkish. The first known written document of the language is a baptismal ritual of the year 1462. There are today approximately one million speakers of Albanian, which has two principal dialects, Gheg, spoken in the north, and Tosk in the south.

The Albanians use the Roman alphabet, with an unusual value given to some letters. *Q,* for instance, represents approximately the sound of *cky* in "stockyard"; it appears in the native name of the country, *Shqipënia,* and of the people *Shqipëtar.* There are in Albania three religions, the Moslem, Catholic and Greek Orthodox, but they have not complicated the linguistic picture, as in Albania's neighbor Yugoslavia.

The Albanian noun has three cases and a postposed article (*mik,* "friend"; *miku,* "the friend," subject; *mikut,* "to" or "of the friend"; *mikun,* "the friend," object). The Albanian verb shows the usual Indo-European complexity of tenses and moods.

It is estimated that at least sixty per cent of the Albanian vocabulary is borrowed from its neighbors. Words like *ar, ergjënt, qen, kupë*

("gold," "silver," "dog," "cup") come from Latin or Romance; *ḳeq* ("bad") is from Greek *ḳaḳos; mish* and *trup* ("meat" and "body") are from Slavic; *fildxhán* ("glass") is from Turkish. Strange phonetic changes occur in the course of the borrowings: the Greek name Alexander has become *Iskander,* and the Latin *imperator,* which the Albanians use in the sense of "king," has turned into *mbret.* Indigenous are *po* and *jo* ("yes" and "no"), and expressions like *mirë dita* ("good day"), *ju falem nderit* ("thank you"), *ju lutem* ("please").

The Albanian speakers have not moved too far from their native heath, but in southern Italy and Sicily are various towns which speak Albanian. They were first founded by refugees from the Turkish fifteenth-century invasion of the Balkans, and while the Albanian of these colonies has not diverged too far from that of Albania proper, it shows interesting differences. Other colonies of Greek and Serbian speakers appearing in near-by localities of Sicily and southern Italy have their origin in similar refugee groups. As a very young man who prided himself on his knowledge of the Italian dialects, I was once challenged by a native of Calabria who told me that if he spoke in the dialect of his native town I would be unable to understand a single word. This proved to be literally true. The Calabrian enjoyed my discomfiture for a while, then proceeded to admit that his "dialect" had no connection with Italian whatsoever, and to enlighten me concerning the existence of Albanian-speaking colonies on Italian soil.

The Celtic languages are remarkable in that their speakers were once far more numerous than they are today. Celtic groups ranged from Asia Minor and ancient Sarmatia on the east to Britain and Portugal on the west. Most of ancient Gaul, the British Isles, Germany as far east as the Elbe, the great Po Valley of northern Italy, a large part of the valley of the Danube were at one time solid Celtic-speaking territories.

Yielding gradually to Roman conquerors, the Celts were for the most part absorbed and latinized, and the most extensive of their languages, Gaulish, disappeared altogether from the world's scene. The two surviving branches are almost entirely located on British soil. Welsh and Cornish are the descendants of the language of the Britons who succumbed to Caesar and later were forced back into the moun-

tain fastnesses of the west by new Anglo-Saxon invaders. "Welsh,"
incidentally, is an English name which the Welsh do not fancy; they
call themselves Cymri. The Gaelic originally spoken in Ireland was
brought to Scotland by a series of conquering expeditions that over-
whelmed the ancient Picts and mingled with them. The Breton of
France is the descendant of Welsh, brought to the Roman province of
Armorica (present-day Brittany) in the fifth and sixth centuries by
fugitives from Britain. Welsh, Breton and Cornish together form the
Brythonic branch of Celtic, while the Gaelic of Ireland and Scotland
and the Manx of the Isle of Man constitute the Goidelic branch. The
name "Erse," applied by the English to the Gaelic of Ireland, is as
little favored by the inhabitants of Eire as "Welsh" is by the Cymri.

There is a curious parallelism between the two branches of Celtic
(Brythonic and Goidelic) and the two branches of Italic (Osco-Um-
brian and Latin). Brythonic and Osco-Umbrian both turn Indo-
European labialized gutturals, like *qu,* into labials (*p*), while Goidelic
and Latin retain the guttural, so that *quinque* ("five") of Latin is *cuig*
in Irish, but *pump* in Welsh and *pumpe* in Oscan. This has given
rise to some rather far-fetched theories concerning an original Italo-
Celtic unit, a hypothetical sub-group of Indo-European, which later
split into separate Italic and Celtic branches.

Today, Irish is the official tongue of Eire, most of whose inhabitants
prefer to speak English, with or without a brogue (recent figures for
the three million people of Eire are to the effect that 2,900,000 of them
can speak English, but only 700,000 Irish). Scots Gaelic is used by per-
haps one hundred thousand Highlanders. Welsh is the language of
about one million people in Wales, most of whom use English as well,
and Breton of as many more people in Brittany, who for the most
part also speak French. The number of people speaking Manx and
Cornish is negligible, and most linguists set down the latter as a dead
tongue.

In all of the Celtic languages complicated phonological phenomena
appear, particularly in connection with initial consonants, which change
in accordance with the final sound of the preceding word, so that a
form like Breton *kalon* ("heart") may appear as *halon* or *galon.* In
Irish and Scots Gaelic the spelling is antiquated and no longer repre-
sents the modern pronunciation (for instance, Irish *mo mhâthair,* "my

mother," is pronounced *mo vaher*). Welsh and Breton are far more modern in this respect, and use a fairly phonetic spelling, provided one remembers that in Welsh *w* and *y* are full vowels (as in *Bryn Mawr*, pronounced *Breen Ma-oor*, or, better yet, in *rhy ddrwg*, "too bad!," pronounced *ree dhroog*). The Welsh *ll*, as in the proper name Llewellyn, has no connection whatsoever with an *l*-sound, but is to be pronounced like a *sh* with the tongue cupped and retracted so that its tip touches the middle of the palate.

All other Celtic languages use the Roman alphabet, but Irish still makes use of the beautiful and distinctive "Irish hand" said to have been introduced from Gaul by St. Patrick and continued uninterruptedly since the sixth century.

Irish still retains four cases (nominative, genitive, dative and vocative), while Welsh and Breton have given up their ancient case-system.

The Indo-European nature of the Celtic languages and their relationship to other branches of the family can be easily gathered from a few examples. "Arm," which is *brachium* in Latin, giving rise to such forms as *bras, brazo, braccio* in the Romance languages, is *brac* in Irish, *braich* in Welsh, *bréac'h* in Breton. "Friend" is *cara, câr, ḳâr* in the three main Celtic languages, and seems connected with Latin *carus,* French *cher,* Italian and Spanish *caro,* "dear." The *novem* of Latin (our own "nine") is *naoi, nāw, naô.* "Eighty" is "four-twenties" in the Celtic languages, as in French (*quatre-vingts*), which may have borrowed it from them.

English is indebted to the Celtic tongues for many of its most picturesque words. "Bard" and "gallowglass," leprechaun" and "banshee," "blarney" and "shillalagh," "colleen," "mavourneen" and "macushla" come from Irish, as does "whiskey," the "water of life." From Highland Scots come words like "slogan," "pibroch," "clan" and "claymore"; the *Dhu* which adorns the name of Roderick in "The Lady of the Lake" is Gaelic for "black." Welsh has contributed "eisteddfod" and "Lloyd." "Druid" seems to hark back to ancient Gaulish. The archaeological "dolmen" (a large unhewn stone resting on two other stones, probably designed for sacrificial purposes) is from the Breton *dol* ("table"), while "cromlech," another term for the same object, is Welsh *crom* ("bent") and *llec* ("flat stone"); the objects seem to come from the prehistoric inhabitants of Europe, but the

names were imparted by the Indo-European Celts. The ancient Gauls contributed numerous words to the vocabulary of their Roman conquerors. The Latin *camisia* which turned into the French and English "chemise," the Vulgar Latin *pettia* that ultimately became "piece," possibly even the slangy *caballus* that supplied the Romance languages with their words for "horse" and English speakers with derivatives like "cavalier," "cavalcade" and "chivalry," were among these contributions.

Armenian, the smallest and most downtrodden member of the Indo-European family, is spoken in the eastern section of Turkey and the southwest of European Russia, in the Black Sea area, around Lake Van and the Mount Ararat of Biblical fame. Barely one million of its speakers have survived Turkish and Kurdish massacres and persecutions. Byron pronounced Armenian "a rich language which would amply repay anyone the trouble of learning it." It is written with an alphabet of thirty-eight letters, introduced about A.D. 400 by St. Mesrop.

The border between Turkey and Iran marks the beginning of one of the most extensive of the Indo-European branches. Beginning with semi-nomadic Kurdish, which straddles the frontier regions of Turkey, Iran and Iraq, this great group sweeps eastward across Iran, Afghanistan, Baluchistan and northern India to the borders of Burma. Its speakers number at least three hundred million, including about two-thirds of India's teeming population of four hundred million, the twelve million inhabitants of Afghanistan, Iran's fifteen million, and about half of the six million people of the great island of Ceylon.

Modern Persian, the chief Iranian representative of the great Indo-Iranian group, uses the word *Iranī* to refer to people, places and institutions, but retains the old *Farsī* ("Persian") when speaking of the country's language and literature. Both of these have a long and glorious history, beginning with the Old Persian inscriptions of Cyrus, Darius and Artaxerxes, who built a mighty empire at the expense of the Babylonians and Assyrians, and continuing with Avestan, the sacred tongue of Zoroaster or Zarathustra, who taught the Persians fire-worship and the principle of everlasting struggle between the forces of good (Ahuramazda or Ormazd) and those of evil (Angra-manyu or Ahriman).

Under the Seleucid and Sassanidan kings, the Persians, now renamed Parthians, fought a long and partly successful struggle against the Romans, but in the seventh century A.D. they succumbed to the Moslems from Arabia. Fire-worship was replaced by the Koran (the Parsees of India are the fire-worshipping refugees who found flight to be a third alternative between the Koran and the sword), and the Persian language, until then fully Indo-European, became a conglomeration of Arabic loan-words, which were later carried by the Moguls to India and became part and parcel of the Urdu variant of Hindustani used by Indian Moslems.

The Persian language of today bears little resemblance to the ancient tongue of Xerxes or that of the Zend-Avesta. Noun-declension and verb-conjugation have been simplified to almost the same extent as in English. The language is now written in flowing Arabic characters, to which slight modifications and additions have been made to conform to the rich Persian phonology. The spoken tongue is a majestic, sonorous one, replete with impressive long vowels, and well fitted to serve as the vehicle of such poetry as Firdausi's and (if he really existed) Omar Khayyam's.

Across the mountain barrier from Persia lies the fabulous land of Hind, itself a Persian, not an Indian, word. In this vast sub-continent, races, languages and religions intermingle in an inextricable, overlapping maze. The people who share the same faith seldom share the same tongue, or vice-versa. Some seventeen major Indo-Iranian languages appear, along with sixteen major non-Indo-European languages of the Dravidian stock, as well as myriads of minor tongues, dialects, and languages of other, obscure families. The Dravidian languages are for the most part concentrated in the Deccan, or southern part of the Indian peninsula, while the Indo-Iranian languages appear in the north. The situation is curiously reversed in the adjoining island of Ceylon, where the northern portion speaks Dravidian Tamil, while the south uses Singhalese, an Indo-Iranian tongue.

Out of a total population of over four hundred million, at least two hundred fifty million speak Indo-Iranian languages, while about one hundred million use Dravidian tongues. Of the former, about one hundred sixty million can be reached with Hindustani, by far the leading

language of India, which bids fair to become the Indian *koine*. But Hindustani is broken into two variants, Hindi, used by people of Hindu religion, and Urdu, spoken by Moslems. The former is written in the ancient, monumental Devanagari characters inherited from Sanskrit, the latter in the Arabic alphabet imported by the Moslem Mogul conquerors. Hindi conserves the old Sanskrit words, Urdu replaces many of them with Arabic and Persian loan-forms. "Death," for example, is expressed in Hindi by *mrityu*, obviously related to Latin *morte(m)*, from which our "mortal" is derived, but in Urdu the current word is the Arabic *maut*. "Foot" in Hindi is *panw*, from Sanskrit *pādah*, related to Latin *pede(m)* and Greek *pod(a)*, even to our own "foot," but in Urdu the Arabic *qadam* is used. Of course Hindi and Urdu speakers can understand each other, but they both take pride in showing their religious affiliations by the use of specific words.

Hindustani and its related Indo-Iranian tongues (Bengali, with sixty million speakers; Marathi, Punjabi, Rajasthani, etc.) go back to ancient Sanskrit, earliest of the Indo-European languages to appear in recorded form. The antiquated form of Sanskrit in which the Vedic hymns were composed may go back as far as 2000 B.C. or thereabouts, definitely antedating Latin, Greek and Avestan by many centuries. It is a hieratic, symmetrical, highly inflected tongue, singularly fitted for precise priestly rituals, and displays the original Indo-European structure better than any other known tongue, with the possible exception of Lithuanian. The accent is one of musical pitch. There are in Sanskrit clearly defined vowel-quantities and a division of consonants into aspirated and non-aspirated (*p* as in "upper" and *ph* as in "uphill"; *g* as in "go" and *gh* as in "hoghouse," etc.). The cases are eight in number, and prepositions are altogether dispensed with, though the equivalents of the prepositions of other Indo-European languages often appear as verb-prefixes. In addition to singular and plural, there is a full-fledged dual number for nouns, pronouns, adjectives and verbs. The latter have abundant complications of tense, mood, voice and aspect.

From Vedic Sanskrit, the language proceeded to Classical Sanskrit, then to the Prakrits, or popular vernaculars. In an ancient Indian play, the kings, princes and priests use Sanskrit, while the lower characters

speak the Prakrits, in accordance with their station in life. Through several intermediate stages, the present-day vernaculars of northern India were developed, Hindustani among them.

The structural changes from Sanskrit to Hindustani are striking. The dual number and the ancient case-endings have entirely disappeared, and the latter have been replaced by an entirely new and unrelated set, which works for both singular and plural, the plural suffix being inserted between the root and the case-ending. Verbs, which in Sanskrit appear in a variety of conjugational schemes, are reduced in Hindustani to a single, very simple conjugation, with relatively few tenses and a standardized syntax. The process of simplification has gone on apace in the eastern as in the western portion of the Indo-European domain.

An increasingly large number of words and terms have come to us of late from the languages of India. *Maharajah* is Sanskrit for "great king"; the *maha* is cognate to Latin *magnus* ("great"), and appears also in *mahatma* ("great-souled"; *atman,* "soul," corresponds to Latin *animus*); the *raj* root corresponds to Latin *rego,* whence our "regal," "royal," etc. *Raj,* without further qualification, was formerly used in India to describe the British rule, and *svaraj* is "self-rule," or independence, which India has finally achieved. Among the titles of India's princes are *ranee* ("queen," closely allied to Latin *regina*), *begum* (also reserved for ladies), *rawal, raikwar, nizam, khan* and *nawab,* from which we get "nabob," though the original meaning is not a man of immense wealth, but a deputy or viceroy.

The Hindu *swami* refers either to a prince or a teacher. *Guru* is more specifically a teacher or professor. *Pundit,* from Sanskrit *pandita* ("gatherer," "one who keeps up"), is also a learned man, particularly a Brahman versed in Hindu lore. *Babu* is a native who serves as a clerk and knows how to read and write, especially English. A *yogi* is a follower of the *yōga* philosophy, which in Sanskrit literally means "union" (with the Godhead). *Khaki,* the color of many western uniforms, is Hindustani for "dust-colored," but comes originally from Persian *khāk* ("dust"). The slogan of present-day Hindustan is *"Jai Hind!"* ("Live India!"), with *jai* from the Sanskrit; that of Pakistan is *"Pakistan zindabad!"* ("Pakistan forever!"), with both Urdu words derived from Persian. Just as Gandhi's title was the Sanskrit *mahatma,*

that of Mohammed Ali Jinnah was the Arabic *qaid-e-azam* ("great leader"). From the tongues of India come "pajama" and "sari," "curry" and "chutney," "swastika" and "thug."

The present tendency is for Hindustani to impose itself as the common language of both Hindustan and Pakistan. In so doing, it must overcome lesser languages which have formidable speaking populations: the Indo-Iranian Bengali of the Bengal and Calcutta regions, with sixty million; the Bihari of the northeast, with thirty million; the Marathi, Punjabi and Rajasthani of the northwest, with about twenty million each; the Dravidian tongues of the south, Tamil, Telugu, Canarese, Malayalam, with ten to thirty million speakers each. But the process is on its way. India, now divided by factors of race, religion and language, may yet become united by the great unifying force of one common tongue, Hindustani.

POSSIBLE RELATIVES OF INDO-EUROPEAN

And the whole earth was of one language, and of one speech.—
Genesis, 11:1

Perennially the question comes up: "If there was original unity among such widely diversified tongues as English, Russian, Greek, Armenian and Hindustani, what is there to belie the possibility that at a much remoter epoch all of the world's languages may have sprung from one common stock? May not the Biblical account of Babel's Tower of Confusion be figuratively, even if not literally, true?"

There is really nothing to belie this *possibility,* just as there is nothing to oppose the theory that Truman and Stalin may have sprung from a common original ancestor, some hundreds of generations ago. But whereas among the languages labelled "Indo-European" the kinship is demonstrable and demonstrated, there is little or nothing to go on when we come to linking such groups as Indo-European and Malayo-Polynesian, or Chinese and Hottentot.

A few daring linguists, like the Italian Trombetti, have strenuously asserted the thesis of the "monogenesis," or single common origin, of all the world's tongues. But their demonstration has been based primarily on elements of vocabulary, individual words, where chance resemblances may occur in accordance with the statistical laws of probability. Just as, if you deal a sufficient number of bridge hands, the identical thirteen-card combination will recur after a few thousand deals, so two languages may independently, and by pure hazard, have the same or a closely similar combination of sounds for the same or a similar meaning in one word out of a few thousands. Italian *donna* and Japanese *onna* sound alike, and both mean "woman"; yet we surmise that they are quite unrelated, and while we cannot trace the

Japanese word to an earlier form, we can press the Italian word back to its original Latin form *domina,* at which point its similarity to the Japanese word becomes far less marked.

Other linguists, basing themselves upon a combination of geographical, historical and linguistic data, have approached the problem from a different angle, endeavoring to set forth a kinship between groups of languages geographically contiguous and which have had some bearing upon one another's historical development. The two language groups geographically and historically closest to the Indo-European family are the Semito-Hamitic and the Ural-Altaic. After investigating the structure, geographical location and known history of these two groups we shall be in a better position to pronounce on the question of their relationship to Indo-European.

The Semitic tongues are so called because they are supposed to have originated with the descendants of Shem after the Tower of Babel episode. Ham's descendants are supposed to have given rise to the Hamitic tongues. Japhet, Noah's third son, is responsible for the "Japhetic," or European tongues, though the term "Japhetic" has also been applied to a hypothetical language group including Iberian, Caucasian, Sumerian, Etruscan and other "Mediterranean" tongues.

Because of the Biblical account of the Tower of Babel and the confusion of tongues, we have "babble" from the Akkadian *bab-ilu,* which really means "the gate of the god." The fact that there is a Hebrew verb *bālal,* "to confuse, confound, mix," is perhaps in part responsible for the tradition.

The Semito-Hamitic tongues, spoken today by approximately eighty million people, cover the Arabian peninsula, Iraq, Syria, Palestine and Transjordan, northern Africa from Egypt to Morocco and from the Mediterranean to the Tropic of Cancer, Ethiopia, Eritrea and Somaliland.

In ancient times, the Semitic branch included Akkadian (the tongue of Babylon and Assyria), Canaanite, Moabite, Phoenician (with its variant Punic, spoken by the Carthaginians), Hebrew, Aramaic or Syriac, and the early Arabic of the Arabian peninsula. The Hamitic branch, which in those days dominated all of North Africa, included the ancient Egyptian of the hieroglyphic inscriptions, as well as the Libyco-Berber tongues of North Africa that still exist today.

In the Ethiopian region, Semitic and Hamitic are intermingled. The Kushitic tongues of Ethiopia (Galla, Somali, etc.) are of the Hamitic variety, while the Semitic Amharic and Tigre spoken by the dominant race seem to have been imported from Arabia across the Red Sea.

Within historical times, many of the ancient Semitic languages disappeared, but Hebrew, Arabic and Syriac lived on. The first tongue, expelled from its Palestinian homeland after the destruction of Jerusalem by Titus and Vespasian, existed somewhat precariously for centuries as a semi-liturgical tongue used by the Jewish communities of Europe and North Africa, but has recently made a triumphal reentry into Palestine, where it is now the official national tongue of the new state of Israel and its rapidly growing population.

Syriac (the ancient Aramaic of the Bible and the language spoken by Christ) is still used today by perhaps one hundred thousand people, mostly Christians who live among the Arabic-speaking Moslem populations of Syria, Lebanon, Transjordan and Iraq.

Arabic, once the isolated language of the Arabian peninsula, served as the vehicle for the conquering religion of Mohammed, and spread like wildfire across North Africa in the seventh century, supplanting the African Latin which at an earlier period had replaced Carthage's Punic. It made its influence powerfully felt in southern Europe, particularly Spain and Sicily, where many words and place-names are of Arabic origin. It gave rise to Maltese, a somewhat hybrid mixture of Arabic and Italian. Moving northward and eastward, it extended as a spoken popular tongue into the countries of the Near East, and influenced Turkish, Persian, Hindustani, even the Malay of southeastern Asia and the Dutch East Indies. Wherever the Moslem religion reaches, in the Balkans, in central Asia, western China, India, Indonesia, the Philippines, central and east Africa, there the Arabic tongue appears as a religious language, fulfilling approximately the same function among Moslems of many races and tongues that Latin fulfills wherever the Roman Catholic faith extends. While the actual number of Arabic speakers is probably about thirty millions, it is no exaggeration to say that Arabic influences, both linguistically and psychologically, hundreds of millions.

The chief tongues of Ethiopia, Amharic and the closely allied Tigre,

have a speaking population of perhaps six million out of Ethiopia's twelve million inhabitants.

Among the Hamitic languages interest attaches particularly to ancient Egyptian because of its function, through tens of centuries, as the vehicle of one of the greatest ancient civilizations. Its use began to decline with the Roman conquest of Egypt, and it became practically extinct after the Moslem invasion. Its most direct modern descendant is Coptic, still used as a liturgical language by Christian groups in parts of modern Egypt. The Libyco-Berber dialects (Kabyle, Shilh, Tuareg, etc.) still endure in North Africa, side by side with Arabic, while the Galla and Somali of Ethiopia and Somaliland eke out a somewhat precarious existence in East Africa.

The main structural characteristic of the Semito-Hamitic family is the word-root consisting of three consonants, with shifting vowels that carry auxiliary meanings, performing the same function as the endings of Indo-European. To exemplify: the Arabic root that conveys the general idea of "writing" is K-T-B. Vowels placed at the beginning and end, or between the consonants, give this root all the needed accessory notions. *Kataba* is "he had written"; *kutiba,* "it has been written"; *yaktuba,* "he will write"; *yuktabu,* "it will be written"; *'aktaba,* "he has made someone write"; *kitābun,* "writing" or "book"; *kātibun,* "writer"; *katbun,* "act of writing."

This characteristic mode of flexion is sometimes compared to the Indo-European ablaut system, as exemplified by English "sing," "sang," "sung," "song." But the Indo-European ablaut is generally traceable to the place of the accent in the original parent language, with a vowel assuming different grades according as it was originally stressed, had the stress on the syllable preceding it, or on the syllable following it (in Greek, for example, a form like *pempo,* "I send," with stress on the *e,* turns into *pepompha* in the perfect, "I have sent," with the *e* shifting to *o* because the accent moves to the preceding syllable; in Sanskrit, *dárçami,* "I see," with stress on the first syllable, becomes *drṣtá* in the past participle, "seen," the *a* being reduced to the zero grade when the accent moves to the final syllable; English "sing," "sang," "sung" show a similar fluctuation of the vowel when the accent moved, in the parent language, to preceding and following syllables since lost). The vowel-changes in the Semitic root, on the other hand, do not seem to have

anything to do with the accent. Furthermore, the normal three-consonant Semitic roots are not paralleled by Indo-European roots, which display a varying number of consonants.

There is, in addition, a distressing lack of similarity between Indo-European and Semito-Hamitic words of what might be described as the fundamental kind. Corresponding to the "brother," "sister," "father," "mother" roots of Indo-European we find in Arabic *akh, ukht, ab* and *umm*. For the "tooth" root of Indo-European, Arabic has *sinn*. The "one," "three" and "ten" roots have as their counterparts *ahad, thalāth* and *'asr,* respectively. Worse yet, no system of regular phonetic correspondences can be found between Indo-European and Semitic similar to those which govern the various branches of Indo-European, permitting one to predict that a word with *p* and *d* in Latin will, under given conditions, appear in English with *f* and *t*. Under the circumstances, such chance resemblances as Hebrew *erets,* English "earth," or Arabic *saba'a,* Latin *septem* lose much of their value.

The two languages of the Semito-Hamitic group which have most influenced the tongues of the west are undoubtedly Arabic and Hebrew, the former of the southern, the latter of the northern Semitic branch. From the standpoint of early Semitic, Arabic is quite conservative, Hebrew extremely innovating, as befits a language that was situated at the Palestinian world-crossroad. Yet the two languages are still quite close to each other, as much so as Spanish and Italian, and a measure of mutual comprehensibility between their speakers exists. "Great," which is *kibīr* in Egyptian Arabic, is *kabbīr* in Hebrew. "Eye" is *'ayn* in Arabic, *'ayin* in Hebrew; "death" is *mawt* in Arabic, *māvet* in Hebrew. The common form of greeting, "Peace to you!," is *assalamu aleykum* in Arabic, *shalom alekhem* in Hebrew.

Arabic preserves many of the emphatic consonants of early Semitic, which Hebrew has lost or merged, and while spoken Arabic produces the impression of being extremely harsh and guttural, Hebrew is comparatively soft and flowing. Both languages have a powerful, majestic rhythm.

Classical Arabic is a unified and highly conservative language, and is used throughout the entire Arabic world for written-language purposes. Spoken Arabic, as a tongue which has been in constant use for many centuries over an extended area, has broken up into numerous

dialects, of which the principal ones are the Moroccan, the Algerian-Tunisian-Libyan, the Egyptian, the Syro-Palestinian, the Iraqī, and the peninsular Arabian. Hebrew, on the other hand, ceased to be a popular spoken tongue some centuries before the time of Christ, surviving as a cultured and liturgical language during the centuries of the dispersion, and this has kept it fairly unified. Minor differences of pronunciation appear in the Hebrew of the Ashkenazic, or northern European Jews, and of the Sephardic Jews of southern Europe and the Mediterranean basin. In the resurrected national Hebrew of Palestine these differences have been merged, with Sephardic pronunciation generally getting the upper hand.

In modern spoken Arabic, as in the Romance languages, there are only two genders, masculine and feminine, and the gender distinction is made not only in nouns, adjectives and pronouns, but even in verb-forms. The dual number still survives in modern Arabic, particularly for things that come in pairs, like hands, feet, and eyes. While feminine nouns generally form the plural by a change of suffix, most masculine nouns form their plural by a change of internal vowels which is reminiscent of English "foot," "feet"; "book" is *kitāb,* but "books" is *kutub;* "dog" is *kalb,* but "dogs" is *kilāb.* Classical Arabic had three cases (nominative, genitive and accusative), but modern Arabic has merged them into one form.

The definite article *al* (or *il* in some spoken dialects, notably the Egyptian) is invariable, like English "the," but the *-l* is assimilated to many following consonants, so that *il sā'a* ("the watch"), becomes *is sā'a.* Possession is indicated by simply placing the possessor after the thing possessed; "the man's house" is *bēt ir rāgil,* literally, "house the man." Adjectives follow nouns and agree with them in number and gender.

The Arabic verb, like the Germanic, has two true tenses, a present, which also serves for the future, and a past. More precisely, the present is an imperfective form, indicating action not completed, while the past is a perfective, denoting completed action, which is reminiscent of the aspects of Slavic verbs. Object pronouns are added on to the verb, which reminds one of what used to happen in the old Romance languages, and still happens generally in Romance with imperative and other forms of the verb.

These and other syntactical points of contact between Semitic and various branches of Indo-European cannot here be discussed in detail, but the possibility that the two families had, if not a common origin, at least a definite historical influence upon each other cannot *a priori* be discarded.

The words that have come into English from Arabic, generally through the intermediation of Spanish, Italian or French, are numerous and varied. "Algebra," "alcohol," "alchemy" (whence "chemistry"), "alkali," "cipher," "zero," "zenith," "nadir" are indications of the progress made by the Arabs in the sciences, particularly mathematics and astronomy, at a period when Europe's cultural standards had lagged behind. Our "magazine" is the Arabic *al-makhsan,* more faithfully transcribed by the Spanish *almacén.* "Dragoman," the near eastern term for guide or interpreter, comes from Arabic *tarjuman,* the root being *tarjama* ("interpret"); the word was borrowed at a very early date by the Crusaders, as evidenced by thirteenth-century French *drogueman.* "Minaret" comes from Arabic *manārat* ("lamp" or "lighthouse"), based on the root *nār* ("to shine"); the lighthouse at Alexandria was taken as a model for this feature of Moslem religious architecture. "Assassin" is the Arabic *hashishin,* or "hashish-eaters," a sect of fanatics who killed Crusaders by treacherous attacks.

As for Palestinian Hebrew, the charge that its revival and use as a twentieth-century vernacular tends to impede Israel in developing a modern state does not seem to be borne out by the linguistic facts. The language shows great powers of adaptation to modern conditions. "Eyeglasses" are *mishkafaim,* formed on the root of *shakaf* ("to watch attentively"); a newspaper is *itton,* from the root of *et* ("time"); *oser,* the ancient word for "sterility," is used for "curfew." Translated words from the western languages abound: *iparon,* "pencil" (from the Hebrew *operet,* "lead") is reminiscent of German *Bleistift; tafue-adam,* "potatoes" (literally, "apples of the earth") is built on the model of French *pommes de terre;* coffee with milk or cream is *kafe hafukh,* literally "overturned coffee," on the model of the Viennese *ein Verkehrter.*

A few words of Yiddish, the fifteenth-century German adopted by the northern Jews in the course of their European wanderings, have penetrated the language of Israel, among them *kumsitz* ("come and

sit"), the name of the favorite communal pastime, sitting on the lawn and conversing in the cool of the evening, and *ayzin* (German *Eisen*, "iron"), used slangily for "strength." But, generally speaking, the use of Yiddish is frowned upon in the Hebrew Palestinian community, where only Hebrew is officially recognized. As far back as 1930, a Yiddish spoken film was picketed and boycotted in Tel Aviv until Hebrew titles were superimposed to accompany the Yiddish speech.

Numerous words have of late come from Palestine to join the ranks of those that had already acquired English naturalization, like the older "seraph," "cherub" and "cabalistic," and the more recent "Yeshiva" ("academy") and "Hadassah" (literally, "myrtle"; the name of a Jewish American women's organization). Among the newcomers are *sabra* (native-born Palestinian Jew, as distinguished from newly arrived immigrants); *Yishuv* ("Jewish community"); *kibbutz* (training camp for those going to Palestine); *Haganah* ("defense"; the name of the Jewish military organization); *Irgun Zvai Leumi* ("National Military Organization"; in this expression, *irgun* is a Hebrew borrowing of the Greek *organon,* from which we get "organ," "organize," etc.); *Vaad Leumi* ("National Council"); *Hatikwah* ("The Hope," which is the name of the Israeli national anthem). The *ha-* appearing at the beginning of many Hebrew words is the definite article, "the."

An Amharic contribution to our vocabulary is the official title of the Ethiopian monarch, *Negus Neghesti,* or "King of Kings." Little has come to us from the tongues of the Hamitic branch, if we except the title, "Pharaoh" ("great house" in ancient Egyptian), the names of the Egyptian gods (Amun-Ra, Isis, Osiris, Horus, etc.), and terms current among Egyptologists, like *ka* (the double of the individual, supposed to linger in the burial-place), *ankh* (the looped cross, symbol of life), etc.

The question of the kinship between Indo-European and Semito-Hamitic must for the present remain in abeyance. Arabic, most extensive among the modern languages of the Semito-Hamitic group, bids fair to continue its influential world-role, while Hebrew, in its revivified and rapidly expanding modern form, appears to be scheduled for a rosy future.

The Ural-Altaic tongues cover a sweep of territory even broader

than the Semito-Hamitic. From Lapland, Finland and Estonia in northern Europe, Hungary in the Danubian valley, and European Turkey in the Balkans, they skip over wide expanses of Indo-European territory to attain extensive continuity in their true homeland, the boundless plains of northern and central Asia. Eastern European Russia, Siberia, Turkestan, Turkey, Mongolia, Manchuria constitute the major portion of the gigantic playground of these languages. But despite this vast territorial range, the speakers of these tongues are relatively few, some sixty or seventy million at the most.

Their possible relationship to Indo-European is complicated by another and more intimate issue, their relationship to one another. Many linguists reject the thesis of Ural-Altaic unity, and prefer to classify these languages into two separate and unrelated families, the Uralic, or Finno-Ugric, including Finnish, Estonian, Lapp, Hungarian, and some of the Siberian languages, like Ostyak and Samoyed; and the Altaic or Turkic, including Turkish, the tongues of the Tatars, Turkomans and Kirghiz, the Mongol of the Kalmuks and Buryats, and the Tungus of the Manchus.

Those linguists who believe in Ural-Altaic unity predicate their belief upon structural similarities. Those who disbelieve it point to the lack of vocabulary resemblances or phonetic correspondences between the two divisions. As for connection with Indo-European, that is fully as difficult to prove as is the relationship between the latter and the Semito-Hamitic group.

Generally speaking, both the Uralic and the Altaic languages show a structure which the older generation of linguists decribed as "agglutinative." This means that the process of adding suffixes to roots, which appears in Indo-European, is carried on to a far greater degree, suffix upon suffix being attached to the root to convey a variety of meanings. In Turkish, for instance, *sev* is the root conveying the general meaning of "love"; *sev-mek* is "to love"; *sev-dir-mek* "to cause one to love"; *sev-me-mek* "not to love"; *sev-il-eme-mek* "to be impossible to be loved"; *sev-il-dir-eme-mek* "to be impossible to be made to be loved."

Nouns in the Ural-Altaic languages take on a variety of suffixes covering all possible case-endings and prepositional constructions of Indo-European; but whereas in Indo-European the case-ending has no separate existence, in Ural-Altaic the postposition is an independent

word; also, Indo-European has entirely different sets of case-endings for the singular and for the plural, while Ural-Altaic uses the same postpositions for both numbers, inserting the plural suffix between the root and the case-suffix. Hungarian, for instance, has *a ház-ban,* "in the house"; *a ház-ak-ban,* "in the houses."

A second general characteristic of these languages is the principle of vowel-harmony. If the root has a front vowel (such as *i* or *e*), the suffix must have a similar vowel, while if the root has a back vowel (like *a, o,* or *u*), the suffix must have one too. This means that suffixes generally appear in double form. The Hungarian suffix for "in" is *-ban* for roots with back vowels, but *-ben* for roots with front vowels ("in the houses," *a ház-ak-ban,* but "in the hands," *a kéz-ek-ben*). This principle has been likened to the Indo-European umlaut, whereby a vowel in the root changes to conform with the vowel of the ending (German *Satz,* plural *Sätze,* or English "foot," "feet," where the *oo* became *ee* to conform with a front vowel in an ending since lost). But if there is any connection between the two phenomena, it must at least be admitted that one is the reverse of the other; in Indo-European it is the vowel of the ending that affects the vowel of the root; in Ural-Altaic, it is the vowel of the root that determines the vowel of the ending.

A third general feature of the Ural-Altaic tongues is the total absence of the concept of grammatical gender. Nouns are not divided into masculine, feminine and neuter, and consequently there is never any agreement for gender. This absence of grammatical gender is carried to the point where "he," "she" and "it" are expressed by the same word.

Japanese shares some of these features, notably the absence of gender and the system of postpositions to express case-relations, and this led many early linguists to affiliate Japanese with Ural-Altaic in one great "Scythian" or "Turanian" family. Modern linguists are much more skeptical on this point.

When it comes to vocabulary-resemblances or a system of phonetic correspondences, such as we find in Indo-European or in Semito-Hamitic, Ural-Altaic unity (let alone connection with Indo-European) leaves much to be desired. It is easy to link the vocabularies of contiguous tongues, like Finnish, Estonian and Lapp, and it is possible to trace,

with considerable difficulty, some relationship of these tongues with Hungarian. It is likewise possible to link Turkish with most of the Soviet Asiatic tongues, even with Mongol and Manchu. But the vocabulary links between the Uralic and the Altaic languages are extremely tenuous and doubtful. This may be due to the fact that in the case of populations whose literary records appear at a relatively late date, and which were for a long time largely nomadic, vocabulary-changes and innovations occurred to a far greater degree than with the comparatively stable Indo-European and Semito-Hamitic speakers, whose linguistic history we can trace back to a much earlier period.

How relatively recent is the appearance of the Ural-Altaic languages may be gauged from the known history of the three chief European components of the group. A few Hungarian words appear in documents of other languages as far back as the ninth century A.D., but the first full-fledged document of the tongue is a thirteenth century funeral oration; in the Middle Ages the use of Hungarian as a written language was generally forbidden under severe penalties. For Finnish, our earliest record is a Bible translation of the year 1548, and the *Kalevala,* the great epic poem of Finland, was not collated from oral sources until the nineteenth century. Turkish first appears in sparse inscriptions of the eighth century of our era, but in the eleventh century a Turkish-Arabic dictionary was composed. The Asiatic languages of the family are even more recent so far as written records are concerned, Mongol first appearing in the thirteenth century and Manchu even later.

In written appearance, Finnish is distinguished by the use of double vowels (*aa, ii, oo,* etc.) which indicate length; double consonants also appear, but many other languages have them; there is in Finnish perhaps the greatest correspondence between spoken sound and written symbol that has been achieved by any tongue. Hungarian likewise uses double consonants, but indicates length of vowels by a written accent-mark over the vowel to be designated as long, as does its close Slavic neighbor, Czech; in addition, Hungarian uses bewildering consonant combinations; *sz,* for instance, has the sound of *s,* while a written *s* has the sound of English *sh; cs* has the sound of English *ch, zs* of *s* in "measure." Turkish, which discarded the Arabic alphabet in favor of the Roman under the guidance of Mustapha Kemal Atatürk

in 1928, represents the *j* of "John" by *c,* the *ch* of "church" by *ç,* the *s* of "measure" by *j,* the *sh* of "she" by *ş.* An *i* with a dot represents the *i*-sound of "machine," but if the dot is absent the sound approximates that of *y* in "rhythm."

All three languages are agglutinative in structure, but interesting similarities and differences appear which do not always go according to the division along Uralic and Altaic lines. For instance, Finnish agrees with Turkish in having no articles, definite or indefinite, while Hungarian, much more closely related to Finnish than to Turkish, has both. Hungarian and Turkish agree in having an indeclinable adjective (with the sole exception that the Hungarian adjective takes a plural suffix, but no case-suffix, when used predicatively), whereas the Finnish adjective has a full declension, both for number and for case. While all three languages have a large assortment of postpositions serving to denote case-relations, the postpositions used in one language bear no resemblance to those used in another. The possessive adjective ("my horse") is expressed by suffixes, but there is no similarity in appearance among these.

When one recalls the broad areas of similarity appearing among the Indo-European or the Semito-Hamitic languages, the lack of such similarity in the Ural-Altaic tongues is distressing. "Yes" is *kyllä* in Finnish, *igen* in Hungarian, *evet* in Turkish; "no" is *nyt, nem, hayir,* respectively. "Good morning" is *hyvää huomenta, jó reggelt, gün aydin;* "do you understand?" is *ymmärrättekö minua, érti ön, anliyorsumunuz.* But when one considers that despite proved original kinship, "good morning" in English is *bonjour* in French, *dobry dyen'* in Russian, *kalimera* in Greek, one can perhaps agree with the point of view of those who hold that time and separation can lead to infinite divergence among languages of the same stock.

Few words have come to us from Finnish. A sample of Hungarian contributions to our vocabulary is "goulash" (*gulyás* or *gulyáshús,* "herdsman's meat"), *csardas* (the name of a national dance) and *puszta* (the Hungarian plain). "Hussar" may come from Hungarian *husz* ("twenty"—a member of a twenty-man platoon); one item of the hussar's uniform, the "shako," comes from Hungarian *csákó;* another, the "dolman" is from Turkish *dolaman.* "Coach" goes back to *Kocs,* the name of a Hungarian town where the vehicle seems to have origi-

nated. "Janissary" (from *yeni-cheri,* "new soldier"), "uhlan" (*oghlan,* "youth"), "tulip" (*tülbend,* "turban") are among the words that come to us from Turkish.

In the world of today, which seems directed toward ever larger political groupings, with cultural predominance exerted by those languages which combine factors of political, economic, military and population preponderance, the future of Finnish, with its four million speakers (six or seven million if one adds the near-by and closely related Estonian, Livonian and Lapp), Hungarian, with nine or ten million at the most, and Turkish, with about twenty million, does not appear too bright. Yet these languages are the vehicles of rich and individualistic cultures which the world can ill afford to lose.

THE FAR EASTERN TONGUES

One picture is worth many thousands of words.—Chinese proverb

The Far East is a vast linguistic world in its own right, with tongues as varied and picturesque as are their speakers, and distributed among several of the world's important language-families.

Outstanding among these languages, by reason of the numbers and accomplishments of their speakers, are Chinese and Japanese, the former a member of the great Sino-Tibetan group, which includes also Burmese, Thai (or Siamese) and Tibetan; the latter unaffiliated, save for a possible but doubtful connection with Korean.

Many believe that there is an intimate connection between Chinese and Japanese, but this opinion is completely erroneous. The only link between the two tongues lies in the fact that they use the same system of writing, and that Japanese has borrowed heavily from Chinese, in the same fashion that Germanic English borrowed from Romance Norman-French. Otherwise, no two tongues could be more dissimilar in structure and basic vocabulary.

The Sino-Tibetan language-family comprises about five hundred million speakers, of whom approximately four hundred fifty million are Chinese. The characteristics shared by these languages are monosyllabism, the complete lack of any system of inflection or grammatical endings, and the use of tone, or pitch, to convey semantic differences between words otherwise similarly pronounced.

Chinese is not only the greatest, but also the earliest of these languages to appear in recorded form. Its documents reach back to at least 1500 B.C., making it coeval with Sanskrit, and not too far removed from Akkadian and ancient Egyptian. Tibetan, Burmese and Thai are

relative newcomers to the field of recorded languages, going back to the ninth, eleventh and thirteenth centuries of our era, respectively.

The great Chinese literary records (the so-called Classics, often attributed to Confucius) go back to the sixth century B.C. Lao-tze, the founder of Taoism, is said to have written one century earlier, and Mencius one century later. This chronology places the golden era of Chinese literature and philosophy at approximately the same period as that of Greek, giving the east and the west an equal share in the founding of the great modern civilizations.

Nowhere is the divergence between the spoken and the written language more evident than it is in Chinese. The written language is one and indivisible throughout the entire vast "Middle Country," while spoken Chinese is a conglomeration of mutually incomprehensible dialects, as different from one another as are English, German and Dutch.

There are in China about four hundred fifty million people, roughly three times as many as in the United States. Of these, about three hundred million speak variants of Mandarin, the dialect of north China and the former Imperial court of Pei Ping, which has more recently been rebaptized *Kuo-yü,* or "National Tongue." (Mandarin, by the way, is not a Chinese, but a Portuguese word, meaning "leader" or "boss.") The remaining one hundred fifty million speak widely diverging dialects, the major of which are Cantonese, the Wu of Shanghai, and the Min of Fukien.

When it comes to writing, all of China, regardless of spoken dialects, uses a common language, which in its more literary reaches is known as *Wên-li,* or "elegance of composition." This is possible because the Chinese characters have little or no connection with sounds, but rather symbolize ideas and concepts. The word for "man" is variously pronounced *jên, nyin, lên, nên, yên,* in different spoken dialects, but the written symbol is the same. Comparison lies with such western written-language symbols as "$5," "lb.," or "$H_2O$," which each western language pronounces differently, but which convey the same meaning to all.

There is a Chinese tradition to the effect that an early emperor, about 2200 B.C., first conceived of a system of straight and broken lines to replace the knotted cords that had previously conveyed simple messages, and that the system was later improved by a sage, who was

inspired by the marks of birds' claws in the sand to devise hundreds
of additional characters. But it seems more likely that the earliest
characters were pictures pure and simple: a circle with a dot in the
center to represent "sun," a crescent to indicate "moon," a torso with
two legs to convey the idea of "man," etc. Then, with the passing of
time and the growth of ideas, some of these characters were combined
to convey new meanings. Many of these combinations are self-evident
even today: the symbol for "light," for instance, is the combination of
"sun" and "moon"; the "tree" symbol repeated twice is "forest"; the
"sun" over the "horizon" is "dawn"; "mouth" plus "bird" gives "song."
The symbol for "words" is "mouth" with "steam" issuing from it,
which is somewhat reminiscent of our "hot air." "Woman" plus
"broom" equals "housewife," and "woman" under "roof" equals
"peace," but lest anyone acquire too exalted an idea of what the
"woman" symbol means to the Chinese, it may be pointed out that
"two women" equals "quarrel," "three women" equals "gossip" or
"intrigue," and that the "woman" symbol enters into the characters
for "jealous," "treacherous," "false" and "uncanny." The "man" char-
acter is said to enter into six hundred combinations, and the "tree"
character into nine hundred.

The person who looks at written Chinese for the first time is be-
wildered by the maze of characters, and wonders what sort of I.Q. a
literate Chinese must have, to remember all of them. Actually, the
situation is not quite so bad as it seems. The basic characters are only
214 in number, and it is simply a matter of combining them into
compound characters, of which the Chinese dictionaries list some forty
thousand, but with only four thousand to eight thousand in general·
use. To make things still easier, compound characters often consist
of two parts, of which one conveys the general idea, the other gives a
clue to the pronunciation. For example, there is a character for "horse"
(pronounced *ma* in Mandarin) which originally was a real picture of
a horse, with a plainly discernible head, neck, tail and four legs. The
spoken word for "mother," by a strange coincidence, is also *ma,* but
pronounced in a different key from the *ma* that means "horse." The
written symbol for "mother" is a combination of the "woman" symbol

and the "horse" symbol, the former indicating that the word has something to do with the feminine sex, the latter informing the reader that the word is to be pronounced somewhat like the word for "horse."

Interesting experiments in picture-writing by the Chinese system are occasionally tried by western linguists who have too much time on their hands. "Pear," for instance, could be represented by a picture of the fruit; "pair" would then be formed by combining two strokes with the pear-symbol, and "pare" by picturing a knife and a pear. In each case, "pear" would give the clue to the pronunciation, while the two strokes or the knife would set the sound into the proper meaning. "Mail" could be represented by a pictured envelope; then "male" would be the envelope with the symbol for "man" in front of it, and "coat of mail" would be a coat in front of the envelope.

Similar experiments are constantly being tried out by the Chinese themselves, by reason of their constant need for new characters to convey the new concepts of the modern world. A very recent example is "uranium," for which spoken Chinese decided to use "U-metal." But the "U" character had to be isolated from the existing character for "grapefruit," which the Chinese call "U-tree," and that for "metal" had to be extracted from "bell," which is literally in Chinese "metal-boy."

The spoken Chinese tongue, with particular reference to *Kuo-yü,* the language of the three hundred-million majority, has its own highly interesting features.

In the first place, all Chinese words are of one syllable. Some say it was always thus, others claim that the one-syllable words of Chinese are cut down from originally longer words (a tendency appearing also in English, where "microphone" becomes "mike" and "airplane" turns into "plane"). Secondly, Chinese lacks a good many sounds appearing in the western languages. Thirdly, words must generally end in vowels, in *-n* or in *-ng.* These restrictions mean that there is a very definite limit to the number of possible combinations that can go to make up a word, as will be readily recognized by those who have played at word-games where you are given a limited number of letters out of which to build words. The actual number of one-syllable combinations permissible in standard Chinese is exactly 240. How, then, can we reach the enormous total of forty thousand "word-ideas"

appearing in Chinese dictionaries, or even the four to eight thousand in common use? In the first place, there is nothing in Chinese, as there is nothing in English, to prevent two words with entirely different meanings from being pronounced alike and written differently. Just as in English we have "waist" and "waste," "strait" and "straight," "meat," "meet" and "mete," "right," "write," "rite" and "wright," so the Chinese have long lists of words sounding exactly alike, but represented by different symbols. In actual speech, they are distinguished by the way they are used in the sentence, just as the English words are; if I say: "Please write the letter," it will not occur to my hearer that I am saying "right" or "rite" the letter; while if the word appears in writing, the distinctive spelling of the English and the distinctive symbol of the Chinese will keep one from misunderstanding.

Secondly, there is nothing in Chinese to prevent combinations of two or more one-syllable words into compounds like our "railroad" or "foxhole," where the compound carries a very special meaning not exactly contained in either of the two component parts. Our compound words are often picturesque, and the Chinese are no less so: "cream," for instance, is "milk-skin"; "lantern" is "lamp-cage"; "strait" is "sea-waist"; "parent" is "father-mother," "God" is "upper-ruler." The generic compound for "clothing" is *i-shang,* where *i* means "upper clothing," *shang* "lower clothing"; "coat-pants," as it were. Often Chinese uses a compound where we would be satisfied with just one of the two components: "way-path" for "way," "look-see" for "see." Occasionally Chinese compounds can get to be complete definitions; "crisis," for instance, is "danger-opportunity," while "virtue" is "faith-piety-temperance-justice."

There is a third resource at the disposal of the Chinese which has no exact counterpart in English. If one is given the name "George" to pronounce, he will utter it non-committally, on an even tone; if he is calling the man in to dinner from the fields, he will shout: "Geo-orge, where are you?," first dropping the voice a trifle, then giving the name a definite upward lilt as he comes to the end of it; if he is deploring something George did, he will say reproachfully: "Geo-orge, how could you?," but this time the voice will drop as he comes to the end of the name; lastly, if there is a sudden knock on the door, and George is being expected, one may ask quickly before unlatching: "George?,"

with a quick rise of the voice. All these different tones of the voice, which we use to indicate varieties of emotion, or under special circumstances, are used by the Chinese to convey different meanings of one and the same combination of sounds. The *ma* that means "mother" and the *ma* that means "horse" are distinguished in speech by being pronounced in two different tones, while if we use the other two tones for *ma* we get "flax" and an interrogative participle somewhat similar to our "huh?"

This matter of the tones of the voice used not to indicate feeling or stress, but to convey different meanings, is the hardest thing about Chinese for a foreigner. It is easy enough to remember the correct tone when you are handling a single word, but when you have a six- or ten-word sentence, and each of the words is to be "toned," you run into difficulties. There is a weird and probably untrue story from Burma (Burmese uses tones like Chinese) to the effect that an American soldier stationed there wanted to buy a native coat, but got a caged tiger instead because he said *hsu* in the wrong tone. It is, however, a standard and true joke in linguistic circles that in one Burmese dialect our old friend *ma* pronounced in five different tones spells out the sentence: "Help the horse; a mad dog comes!"

History informs us that the Chinese were not always aware of the fact that they were using tones. When the theory was first advanced by some Chinese scholars, about A.D. 500, many high-placed Chinese were skeptical. The Emperor Wu Ti, one of the unbelievers, summoned the sage Shên Yo. "Come, tell me," he said. "What are these four tones?" "They are . . ." replied the sage, and then he used four words, each clearly exemplifying a different tone; but the four words, freely translated, meant: "Whatever Your Majesty pleases to make them." The ingenious example was too much for his Majesty, who thenceforth became a firm believer in the existence of tones.

The modern educated Chinese are quite aware of their tones, but they are not at all worried by them, as are the foreigners who are trying to learn their language. They have learned them by the natural process of imitation, unconsciously, at their mothers' knees, and in given contexts.

One man who had spent many years in China told me that he had never bothered to learn tones. He had made use instead of another

typical Chinese-language device, the addition of a classifying or explanatory word. We can say in English: "This is a lovely ash" or "This is a lovely ash-tree." "Ash," of course, should be enough; but "tree" classifies "ash" and removes all possibility of misunderstanding; "ash" is now placed in the "tree" class beyond the shadow of a doubt, and cannot be confused with the "ash" from a cigarette. Chinese has dozens of similar words, which serve to explain other words and make their meaning absolutely clear. There is one, for instance, that is applied to round objects, like rings and coins; another works for small things, like pearls and grains of rice; one for human beings; one for animals; one for articles of clothing. The "head" in "fifty head of cattle" has been described as the perfect English counterpart of a Chinese classifier. The classifiers very frequently appear in pidgin English, which was originally a compromise between English vocabulary and Chinese syntax. The "piecee" in "two piecee shirt" and the "fella" in "three fella man" are typical classifiers.

Chinese grammar is distinguished by its lack of morphology (that is, inflectional endings) and its almost complete reliance upon syntax, or word-order. The majority of Chinese words cannot be classified as nouns, verbs, adjectives or adverbs. They are roots, and can be made to serve any function for which there is a call. *Ta*, for instance, conveys the "large" or "great" idea. It can be used as an adjective to mean "great," as an adverb to mean "greatly," as a noun to mean "greatness," as a verb to mean "enlarge." The "up" root can mean "upper," "up," "to climb," "height." The situation is not too different from that of English, where we have "I am going up," "up the stairs," "uptown," "the ups and downs of life," "I'll up you five." This means, however, that position is everything in the life of the Chinese sentence. A word used as the subject must always come before the word used as the verb, with the object following. "I see he" and "he see I" are perfect renderings of Chinese sentences, since Chinese does not even make the distinction of subject or object form in the pronoun which English still makes. Words used as verbs have none of the distinctions appearing in English: "he writes," "I wrote," "you will write," "they have written." What we get instead is "he this day write," "I past day write," "you next day write," "they write finish." There are no genders, no endings, no cases, no declensions or conjugations—only individual

words. Chinese, generally, does not even take the trouble to indicate singular or plural; all its nouns are like our "sheep" and "deer" (you can, of course, say "one sheep," "two sheep," "many sheep").

The intricacies of Chinese syntax, style and imagery are perhaps best illustrated by a few examples. Where we would describe an orator as "silver-tongued," Chinese says "gold mouth jade words"; the warning posted in the vicinity of railroad tracks, which in an English-speaking country would run "Trains—Danger," is expressed in Chinese by "small heart fire car." For our "bon voyage" to one departing, Chinese says: "one road tranquil quiet," while if one wishes to express regret over the fact that he has not seen another person for some time, the proper expression is "one day not see like three." The state of the weather is often picturesquely described by the peculiar combinations "one coat day," "two coat day," and so on up to seven or even nine coats, to indicate varying degrees of temperature.

Two very common Chinese expressions which it is well to remember if you are going to China are *ding hao,* which does service for "O.K.," "all right," and *mei yu pan fa,* "nothing can be done," which is as fully effective in denoting frustration or helplessness as the Frenchman's shrug of the shoulders or the Russian's *nichevo.* Other current expressions are *ni hao,* "you well" or *ni hao pu hao,* "you well not well" (in other words, "are you well or not?," "how are you?"). These general formulas of greeting may, however, be replaced by *tsao an, p'ing an, wan an,* "morning peace," "afternoon peace," "evening peace." "Thank you" is *hsie hsie,* "please" is *ch'ing,* and for "you're welcome" or "don't mention it" Chinese uses the picturesque expression *pu yao k'e ch'i,* which literally means "no have guest spirit," gently chiding your interlocutor for not acting as a guest should.

The fact that Chinese writing has little phonetic value deprives spoken Chinese of the visual support and stabilizing influence that western tongues normally derive from their written counterparts, with the result that Chinese pronunciation with respect to many sounds is somewhat vague and fluctuating. To this difficulty is added the faulty transcription of Chinese sounds which is in general use, under the name of Wade, its deviser. In accordance with this system, *p, t, k* are used to render sounds which come closer to English *b, d, g,* while *p', t', k'* render sounds similar to those of English initial *p, t, k;* the same

holds true for *ch* and *ch'*, *ts* and *ts'*, with the result that a name is commonly spelt *Chiang* when it is more properly pronounced *Jiang*, while the name of the Chinese language, *Kuo-yü* in spelling, is better pronounced *Guo-yü*. Many vowel sounds are dull and indefinite, and variously pronounced by different native speakers.

Despite these many drawbacks, the study of Chinese in the west, once limited to a few score specialists, has of late become almost a vogue. Whether the immediate future of China justifies this interest or not, the long-range importance of a language spoken by nearly one-fifth of the earth's inhabitants, and which has given rise to a flourishing literature and philosophy, cannot be minimized.

There are numerous hypotheses as to the origin of the Japanese language, but none of them is substantiated. The old belief that Japanese formed part of a vast "Scythian" or "Turanian" group, which included also the Ural-Altaic languages, is now generally abandoned. Hardly more plausible is the theory that Japanese was originally a Polynesian tongue, somehow related to the Malay of Indonesia, which has a similar system of sounds and syllabic structure. But the morphology of Malay comes closer to that of Chinese than to that of Japanese, while vocabulary-correspondences are conspicuous by their absence. The Japanese legend concerning the descent of the Japanese people from the sun-goddess Amaterasu is of as little help to the linguist and historian as the insulting Chinese story to the effect that the Japanese are a cross between Chinese shipwrecked youths and maidens and a tribe of monkeys.

Japanese written records begin in the seventh or eighth century of our era, when Chinese and Korean Buddhist missionaries brought the Chinese characters to the islands of Japan and put them into use by the very simple expedient of giving to each character a Japanese spoken-language value. The pictogram for "man," for instance, which is read *jên* by the Chinese, was read *hito* instead. But difficulties soon developed. Unlike Chinese, Japanese is an inflected language, with case-postpositions for nouns, and tense and mood endings for verbs. Written Chinese, relying exclusively upon word-order, makes no provision for such variations in a word. The upshot was that in the ninth century a Japanese Buddhist priest hit upon the clever device of isolating a certain

number of Chinese characters and giving them an invariable phonetic value, to cover all of the possible syllabic combinations of the Japanese language. If at this point the Chinese ideographs had been discarded and the syllabic symbols used exclusively, Japanese would have today a system of writing not too unlike that of the western languages. Instead, the next step taken by the Japanese was to combine the new syllabic characters with the Chinese ideograms, and this method persists to the present day. To render the spoken *hito no* ("of the man"), the ideogram for "man" is used, followed by the syllabic character that has the invariable phonetic value of *no; hito ni,* ("to the man"), is the ideogram for man followed by the syllabic character *ni; kakimashita* ("wrote"), is expressed by the ideogram for "write" (*kak-*) followed by the syllabic characters *i-ma-shi-ta.*

To the frequently asked question whether a Chinese can read Japanese and vice-versa, the answer is that there is a limited measure of comprehension. The root-words, though quite different in speech, are generally represented by identical symbols in both languages. But the Chinese will be baffled by the Japanese noun- and verb-endings expressed in syllabic characters, while the Japanese will be left in wonder as to the intricacies of Chinese syntax, which is quite different from his own.

Spoken Japanese, in contrast to Chinese, is decidedly a polysyllabic language. In fact, some of its verb-forms run to unconscionable lengths, although the majority of the roots consist of two syllables. A few Japanese words are distinguished by tones, but for the most part tone plays no semantic role in the language. The syllabic structure is simple, being of the consonant-plus-vowel type, and the general acoustic effect of Japanese would be closer to that of Italian than to that of Chinese were it not for a certain guttural quality that distinguishes the tonality of most far eastern languages. There are long vowels and short vowels in Japanese, as well as vowels so reduced that they are practically silent, like the *-u* at the end of many verb-forms (*arimasu,* "is" or "are," normally pronounced *arimas'*) and the *i* within words (*arimashita,* "was" or "were," pronounced *arimash'ta*). Double consonants appear, and must be fully pronounced.

There is no strong stress in Japanese, the syllables of a word being about equally stressed. *Yokohama* is pronounced *Yókóhámá,* not *Yoko-*

háma. A certain amount of stress, however, falls on long vowels, as well as on vowels followed by double consonants. Within the sentence, case particles, or postpositions, are specially stressed, which gives the Japanese sentence a rhythm completely foreign to western ears, but not too unlike that which schoolboys erroneously impart to Latin when they recite paradigms (*murús, murí, muró,* etc., instead of *múrus, múri, múro*).

Like many other languages, Japanese is completely lacking in the matter of grammatical gender. This does not mean that sex cannot be expressed: *inu* is "dog," *o-inu* "male dog," *me-inu* "female dog"; *ko* is "child," *otoko no ko* ("man-of child") is "boy" and *onna no ko* ("woman-of child") is "girl." But there is no such thing as agreement for gender, and even such suffixes as *san,* used after names, may indifferently express "Mr.," "Mrs." and "Miss."

The Japanese notion of grammatical number is almost equally vague, though there are many (perhaps too many) suffixes that may serve to indicate plurality if one really wants to do so. *Ko* ("child"), may be pluralized by adding *domo,* but strangely enough, *ko-domo* may also express the notion of a single child.

Most striking is the Japanese insouciance with regard to grammatical person. One can, if he deems it necessary, say "I," "you," "he," "we," "they," but generally speaking these words are omitted. *Doko e ikimasu ka* (literally, "where to there-is-a-going?") is currently used for "Where are you, is he, are we, are they going?" The sensitive Japanese are slightly shocked by western insistence upon personalities, and the use of the subject pronoun, so absolutely necessary in Chinese, is in Japanese largely the mark of the foreigner. Still, one can say, if he wishes, *watakushi wa wakarimasen,* which would, literally, mean something like: "So far as I am concerned, there is no understanding"; but normally, the Japanese will give his listener credit for intelligence and say simply *wakarimasen* ("there-is-no-understanding"), it being understood that this refers to the speaker.

All case-relations are indicated by postpositions, of which a few common ones are *wa* and *ga,* which indicate the subject, *no,* which marks possession, *ni,* for the indirect object or location, and *wo* (more often pronounced *o*) for the direct object. *Watakushi ga* is "I," *watakushi wa* is "so far as I am concerned," *watakushi no* is "my,"

"mine," "of me," *watakushi ni* "to me," *watakushi wo* "me." In like manner, *hon ga* is "book" (subject), *hon no* "of the book," *hon ni* "to the book," *hon wo* "book" (object).

The word-order is rigidly formalized, and not too unlike that of Latin. Compare *tsukue no ue ni hon ga takusan arimasu* (literally, "table of top on book (subject mark) many are"; "there are many books on top of the table") with Latin *mensae in culmine libri permulti sunt.*

The Japanese verb is in a class by itself. It offers the learner the advantage of being completely impersonal, so that there is no need of learning personal endings, but makes up for this simplicity by the intricacy of its familiar and polite forms, as well as by its numerous tenses and moods. *Taberu* is the verb "to eat," but can be used in this form only if one is speaking familiarly. The polite form generally used among equals is *tabemasu.* If one wishes to go beyond the polite stage and use an honorific form, which implies super-politeness, he uses an entirely different verb, *meshiagaru.* The foreigner would ordinarily have little use for the familiar form, were it not for the fact that it must be used in subordinate clauses even though the verb of the main clause is polite. The polite past is formed by the suffix *-imashita,* an indefinite future by using *deshō* after the familiar root, the conditional by the suffix *-imasureba,* and there is a large assortment of participial forms, one of which appears in the imperative, where "please buy" takes the form of "buying, please." There is no change of word-order for the interrogative, but only the addition of the questioning particle *ka,* while negative forms often take the ending *-imasen.* These are only a few of the many complexities of Japanese verbs, which are joined by many adjectives that take on verb-endings, and then acquire the meaning of "to be" plus whatever quality the adjective denotes.

Japanese numerals come in two series, one of which is borrowed from Chinese while the other is native. These numerals change their form according to the nature of the noun with which they are used, becoming true determinatives or classifiers. "Five," in the numeral series borrowed from Chinese, is *go;* but "five pens" is not *pen go,* but *pen gohon* ("pen five-round object"); "five men" is *hito gonin* ("man five-person"); "five dogs" is *inu gohiki* ("dog five-animal"); "five birds" is *tori gowa* ("bird five-fowl"). There is some doubt as to

whether this concept of classification was borrowed from Chinese along with the numerals or formed part of the original Japanese linguistic equipment, but the former supposition seems more likely.

Japanese expressions are fully as picturesque as the Chinese. Where the Chinese say "afternoon peace," "evening peace," the Japanese use simply "it is afternoon," "it is evening" (*konnichi wa, komban wa*). The Japanese "good morning," on the other hand, sounds like the name of one of our States, *ohayō*. The Japanese "good-bye," *sayōnara,* literally means "if it must be so." One way of saying "I'm hungry" is *hara ga hette iru,* "the belly has shrunk" (*hara* appears also in *hara-kiri,* "belly-cutting," the favorite Japanese form of suicide, but the word is avoided by fastidious Japanese in the same fashion that "belly" is shunned in English). "I'm thirsty" is *nodo ga kawakimashita,* "the throat has grown dry." "Pleased to meet you" is *o me ni kakarete saiwai desu,* which freely translated means "for the first time I have the honor to hang from your eye." Two extremely common phrases are *shigata ganai* ("it can't be helped"), and *ano ne,* which serves to attract attention, express futility, wonder, sorrow, regret, appreciation, or astonishment at the high price of an object.

The intricacies of Japanese polite forms are bewildering. In addition to the honorific verbs, there is a particle *o,* prefixed to nouns, which is erroneously translated by "honorable," but in reality glorifies the person addressed. *O mizu kudasai* means not "honorable water, please," but: "You, honorable person, please bring water." Names of relatives differ radically according as it is the speaker's relative or that of the person addressed that is referred to. "Wife" is *tsuma* or *kanai* if I refer to my own wife, but *okusama* if I am speaking of yours; "husband" and "son" are *shujin* and *segare* if they are the speaker's, but *dannasan* and *musukosan* if they are his interlocutor's.

A story told about the use of honorifics in Japanese is to the effect that a Nazi delegation visiting Japan made itself obnoxious by its rudeness. The sarcastic Japanese reply to this display of occidental uncouthness was to double and triple the honorifics, until by the time the Nazis left the rafters were ringing with super-honorifics, lavished in reckless and insincere abandon.

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samurai, the medieval feudal retainers of Japan; *jū-jutsu* and *judo,* Japanese forms of wrestling (the former means "soft art"); then the crop of war and post-war words: *banzai,* the Japanese cheer, literally, "20,000 years"; *kamikaze,* the Japanese suicide planes, named "heaven-wind" after the typhoons that wrought havoc with Kublai Khan's invading Mongol fleet; *bushidō,* the warrior's code; *zaibatsu,* the financial clique.

Japanese, on the other hand, has borrowed heavily from English. Names of western-style foods (*bifuteki, choppu, hamu, beikon, chīzu*), tableware (*naifu, fōku*), wearing apparel (*nekutai, hankechi, botan*), military terms (*raifu, tento*), writing implements (*pen, inki*) have entered the Japanese vocabulary, along with the majority of our sporting terms, particularly in the field of baseball, which is Japan's most popular sport.

It is already a far cry to the days when Japan held control over territories inhabited by five hundred million people. The linguistic penetration effected by the Japanese in the lands they temporarily conquered was not very deep. Only in Korea, which was held by Japan for some decades before World War Two, did the Japanese language take a real foothold. Today, Japanese is restricted to the islands. Still, it is the tongue of eighty million people who have shown great genius in assimilating and adapting many aspects of the more ancient Chinese culture as well as of the modern civilization of the West. It would indeed be a pity if the study of Japanese, which took root and flourished in America as a war necessity, were to be forgotten in the doubtful days to come.

THE WORLD'S OTHER TONGUES

Language, as well as the faculty of speech, was the immediate gift of God.—Noah Webster

The remaining languages of the earth are numerous, far too numerous to be described or even enumerated in a work of this sort. What they lack in commercial, political or cultural importance they make up for in picturesque variety.

Chief among the secondary groupings of the world's tongues is the great Malayo-Polynesian family that stretches across the south Pacific and the Indian Ocean, from Easter Island, off the coast of South America, to Madagascar, off the coast of Africa, with stopping-off points in such diverse localities as Hawaii, Samoa, Tahiti, New Zealand, the Solomon Islands, the Philippines, Indonesia and Malaya.

The number of speakers of Malayo-Polynesian languages comes close to one hundred million. Among the languages we find tongues of widely different phonetic pattern. Some, like Hawaiian, are almost wanting in consonant-sounds, others are relatively rich. Yet despite these structural differences and the enormous distances intervening, it is not too difficult to recognize their kinship A word like "five" is *lima* in Indonesia, the Fiji Islands, Samoa and Hawaii, *rima* in New Zealand and Tahiti, *dimi* in Madagascar; "nine" is *siwa* in Indonesia, *tsiwa* in Fiji, *iwa* in Hawaii and New Zealand, *iva* in Samoa, *sivi* in Madagascar.

For the sake of geographical rather than linguistic convenience, the Malayo-Polynesian languages have been divided into Indonesian, Melanesian, Micronesian and Polynesian. The common suffix "-nesian" is Greek and means "pertaining to islands." Micronesia is "small islands," Melanesia "black islands," Polynesia "many islands."

Because of their general lack of a written form and cultural tradition, many of the languages of the Pacific have in the past been subject to rapid and drastic change. There is an unauthenticated story to the effect that English traders visiting an island in the Pacific in the eighteenth century recorded the native speech, but that another party visiting the same locality in the following century found the language changed beyond recognition; however, the population may have changed, or perhaps it was not the same island. At any rate, the Malayo-Polynesian tongues illustrate the principle of similarity combined with diversity. On the single island of Guadalcanal, which is about eighty by twenty-five miles, twenty Melanesian dialects are spoken. On the Philippine island of Leyte, the inhabitants of the eastern portion speak Samarino, those of the western half Cebuano, and interpreters are needed between the two. The Philippines, with sixteen million people, have over fifty different languages and dialects, chief among which are Visaya, Ilocano, Moro and Tagalog. Several million Filipinos still speak Spanish, a relic of pre-Spanish-American War days, when the islands were a Spanish possession.

Maori is the original Polynesian tongue of New Zealand, still spoken by nearly one hundred thousand natives. Many Maori words have penetrated the English of New Zealand (*paheka* for "stranger," *mana* for "prestige," *tenakoe* for "hello," *rangitira* for "big chief," *kai* for "food," *kia ora* for "good luck"). In like manner, Hawaiian words like *hula, ukulele* (literally "jumping flea"), *luau* or *hukilau* ("banquet"), *lei* ("wreath"), *pilikia* ("trouble"), *haole* ("white man"), *kamaiina* ("old timer"), *hoomalimali* ("boloney") have entered Hawaiian English. *Aloha* is in Hawaiian almost anything you want to make it, from "hello" to "good-bye"; it can even mean "I love you" if you add *mi loa* to it. *Kapu* is Hawaiian for "taboo," and illustrates the consonant-shifts that are made necessary by Hawaiian's poverty of consonant-sounds.

Malagasy is the Malayo-Polynesian tongue of Madagascar, spoken by nearly four million. Among its interesting words are *hova, zarahova* and *andevo,* the names of three of the island's many castes, which are said to outnumber those of India.

Leading among the Malayo-Polynesian tongues is Malay, a language of common intercourse for the Dutch East Indies, British Malaya and

adjoining regions. The creation of this *lingua franca* was rendered necessary by the vast number of Indonesian languages spoken in the area. Even on the comparatively small island of Java, where Javanese is the tongue of the twenty-million majority, there is a six-million minority that speaks Sundanese, and Javanese itself assumes a three-fold form, Ngoko for the common people, Krama for the aristocracy, and Madya for interchange between the two, with practically every word differing either completely or in the endings.

By reason of its musical quality, Malay has been styled the "Italian of the Orient." It has no harsh sounds and very few difficulties of a grammatical nature, with no conjugations or declensions, roots mostly of two syllables, a consonant-vowel arrangement, and loan-words chiefly from Sanskrit and Arabic. When Malay speakers became Mohammedans in the thirteenth century they adopted the Arabic alphabet with a few modifications, but today the language is for the most part written in Roman characters. There is, however, a difference of spelling between the "Dutch" Malay of the islands and the "British" Malay of the mainland, which is reflected in such place-names as Surabaya (British spelling), which appears as Soerabaja in the writing of those who use the Dutch orthography. Since the rise of the Indonesian Republic, additional language changes have appeared. *Tuan,* the Malay word for "boss" or "master," is more seldom heard; *djongos* ("boy"), has been replaced by *bung* ("comrade"), and place-names given by the Dutch, like Batavia, have reverted to their native form (Djakarta).

From Malay there come to us a few words: *orang utang,* literally "jungle-man," but with "man" first; Malay indicates possession by the very simple expedient of putting the possessor after the thing possessed; *Mata Hari,* "eye-day," for "the eye of day," "the sun"; *cherutu,* "cigar," which Malay had previously borrowed from one of the languages of southern India; even "so long," which is the Malay *salang,* borrowed from the Arabic *salaam,* "peace."

A very recent theory concerning the languages of the Pacific is that the islands were settled by overseas migrations of pre-Inca Peruvians from the mainland of South America (or perhaps vice-versa). Kon-Tiki, the name of a mythical Peruvian leader, reappears as Tiki in the Marquesas, with a similarity of tradition concerning the Pacific odyssey. *Kumara* is a name for the sweet potato common to both Poly-

nesian and Peruvian Indian. The implications of this theory are such as to give comfort to the believers in the monogenesis of language, but the evidence so far is quite scanty.

The original inhabitants of Australia, Tasmania and the interior of New Guinea speak languages which do not seem connected with the Malayo-Polynesian family. Native Australian languages number well over one hundred, and while the original tongues of Tasmania are now extinct, there seem to have been at least five. The precise number of Papuan languages of New Guinea has never been accurately determined. The dying tongues of the Australian natives show remarkable diversity and extraordinary features. One of them, Aranta, displays such complexities of structure as nouns that have to be rendered by verbs, combined with extremely primitive concepts. Such words as "boomerang," "kangaroo," "billabong" and "cooee" have come to us from the Australian languages, but there are many others locally used, like the *woomera* (possibly a variant of "boomerang") that describes the base of the throwing-spear used by some Australian aborigines, the *wap* of the Murray Islanders, the *dugong,* or sea-cow of Torres Strait, and the *bunyip* that is applied to a mythical animal reported to have been seen in certain localities of the interior.

The continent of Africa south of the Tropic of Cancer is the homeland of the African Negro languages, in their three great divisions, Sudanese-Guinean, Bantu and Hottentot-Bushman. These families are subdivided into very numerous languages, of which a few (Ruanda, Fula, Yoruba, Luba, Mandingo, Ibo, Somali, Galla, Zulu, Fanti and Xhosa) number over two million speakers. The two great African Negro languages that serve as tongues of common intercourse for their respective areas are the Hausa of Nigeria and the Swahili of the east coast. The latter has reached such a stage of development that the comedies of Molière have been successfully translated into it and presented, with an all-African cast, in the city of Dar-es-Salaam. In this tongue, which is to some extent representative of the Bantu group, nouns are placed into distinct classes (man, tree, water, etc.), each of which receives a special distinguishing syllable or sound which is prefixed to all nouns of that class and to adjectives associated with the

nouns. A shift from singular to plural is attended by a complete shift
of prefix. Thus, *m-thu m-zuri* is "handsome man," but *wa-thu wa-
zuri* is "handsome men"; adverbs often take the same prefix as the
verb they modify: *ku-fa ku-zuri* ("to die beautifully").

From the native languages of Africa there come to us such words
as "okra," "gumbo" and "juke," said to be from a Guinean *juku.*
The English of South Africa uses additional Bantu words, like *impi*
("army"); *donga* ("gully"), *indaba* ("pow-wow"), *amasi* ("sour
milk"), *inkosi* ("thanks").

The total number of speakers of African Negro languages is some-
what roughly estimated at about one hundred million. It would not be
surprising if, in this age of progress and standardization, one of the
two leading Negro languages (Hausa, with its estimated thirteen
million speakers, or Swahili, with eight million) were one day to take
the lead and become the universal tongue of common intercourse for
all of Africa's black populations, in the same fashion that Hindustani
is assuming that role in India.

The languages of the American Indians have aroused perhaps more
controversy than all others. On the one hand, they display the most
infinite diversity of structure and forms of expression, which would
lead linguists to deny all common kinship among them; on the other,
they show certain features of similarity (like the form *na* for the ex-
pression of the first person singular in both North and South America)
which encourage some linguists to continue seeking a common origin
for them. The best we can say at the present moment is that about
three hundred seemingly different linguistic stocks, each subdivided
into separate languages and dialects, appear among the Indians of
North, Central and South America. Those of the United States, of
whose speakers less than a quarter of a million survive, are divided into
about sixty-five families, but at least forty per cent of the original
Indian tongues of the United States have become fully extinct since
the coming of the white man. The groups that remain are constantly
shrinking.

During the war, our few surviving Navajo speakers were utilized
by the Armed Forces for purposes of secret radio communication that
would be unintelligible to the Japanese. The reason why they were

chosen in preference to all other U.S. Indian groups was that for some reason they had been overlooked by the ubiquitous German linguistic scientists who before the war had studied the American Indian languages. Our Navajo communications experts had to invent words for objects that did not exist in their tongue, like "jeep," "radar" and "anti-aircraft," but the use of the Navajo language as a secret code was quite successful in keeping the enemy from knowing what we were saying.

South of the Rio Grande, the American Indian languages enjoy far greater vitality than in the United States or Canada. The Aztec tongue is still spoken by nearly one million people in northern and central Mexico, and is quite alive in Mexican place-names. Characteristic of this language is the *tl*-group found in names like Tlaxcala and Nahuatl, the *coyotl, chokolatl* and *tomatl* that give us "coyote," "chocolate" and "tomato." "Aztec" means "Crane People," "Toltec" "skilled workers" (this is an Aztec name; the Toltecs' own name for themselves is Aculhuaque, or "Strong Men"). Montezuma is a Spanish shortening of *Montecuzumai Thuicamina* ("When the Chief is Angry, He Shoots to Heaven"). South of the Aztecs and Toltecs are the Mayas of Guatemala and Yucatan, who dominated Central America during the first twelve hundred years of our era.

In South America, all of the original Indian languages, from the Carib of the Antilles to the Araucanian of Chile, are very much alive. Chief among them is Quechua, which extends from Ecuador, across Peru and Bolivia, to northern Argentina, with about four million speakers. In Paraguay, the everyday language of the population is Tupi-Guaraní, though Spanish is official. The Peruvian Government, with the aid of University of Oklahoma linguists, is collecting and analyzing some fifty Indian languages spoken within its borders, and in preparation for the 1950 Pan-American census phonograph recordings have been made in numerous American Indian languages to explain the purposes and value of the census. These will be carried by sound-trucks to the interior of South American countries where the radio and the press do not reach.

Any attempt to describe the American Indian languages *en bloc* would be futile. Some of them are polysynthetic, which means that words have little if any individual status, but become meaningful only

when placed in a sentence; or, putting it another way, the entire sentence forms one meaning-unit, with none of its component parts enjoying true separate existence. Oneida *g-nagla-sl-i-zak̯-s* ("I am looking for a village") illustrates this structure: *g-* carries the meaning of "I"; *nagla* conveys the idea of "living"; *sl* is a suffix that gives *nagla* the force of a noun (therefore, *nagla* plus *sl* conveys the idea of "village"); *i* is a verbal prefix, indicating that *zak̯* is to carry a verbal idea; *zak̯* has the general meaning of "look for"; *s* is the sign of continued action. None of these parts would convey any very definite meaning if used by itself. Polysynthetism, however, is characteristic of other language families, notably the Basque and the Eskimo-Aleut, while many American Indian tongues do not display it to any appreciable degree.

A linguistic curiosity in connection with American Indian names is the different spelling they assume according as they were first transcribed by English or by Spanish speakers. The name of a tribe like Tihuanaca, in South America, would appear as Tiwanaka in English transcription, while Quechua would be Kechwa if we had gotten there first.

The Caucasian language-group of the Caucasus region in the Soviet Union has perhaps two million speakers, distributed among such tongues as Georgian, Lesghian, Avar and Circassian. Strabo, the ancient historian, stated that there were seventy tongues in this region, and modern linguists, curiously enough, find the count to be the same today. The medieval Arabs called the Caucasus "the Mountain of Tongues." One of these languages, Stalin's native Georgian, enjoys a fairly long tradition, with a fifth-century A.D. translation of the Bible as it first document.

Some linguists hold a theory concerning the kinship of a widespread "Mediterranean" group of tongues, said to include Caucasian, Iberian, Basque, Etruscan and Sumerian. It is true that a region in the southern Caucasus once bore the name of Iberia, like the peninsula consisting of Spain and Portugal, but outside of this the evidence is slight.

The present-day Basque that straddles the northern Pyrenees is said to be the descendant of an ancient Iberian tongue once spoken through-

out the Iberian Peninsula and in Aquitania. According to the tradition, the hardier Iberians who refused to submit to Roman rule retreated into the mountain fastnesses of the Pyrenees and continued to speak their language, while their weaker brethren succumbed to Romanization and became Latin speakers.

Today about one million people speak Basque, on both sides of the Franco-Spanish border. The Spaniards use four different names for the Basques (*basco, vizcaíno, vascuence* and *vascongado*), but the Basques' name for themselves is *Euskar*. The Basque language enjoys a tradition of difficulty which the Basques themselves do nothing to dispel. They have even created a legend to the effect that at one time the devil spent seven years trying to learn their tongue so he could tempt them, but finally had to give up in disgust. The structure of Basque is somewhat reminiscent of the polysynthetism of some American Indian languages (*ponet-ekila-ko-are-kin,* literally, "cap-the-with-of-with," means "with the one who has the cap"), and this has at various times given encouragement to those who believe in the lost continent of Atlantis, joining what today is Europe with America. But to the best of our present knowledge, Basque is unaffiliated, and will probably remain so.

The Ainu of the white-skinned dwellers of Hokkaido, the northernmost of Japan's islands; the Hyperborean or Palaeo-Asiatic tongues of northeastern Siberia and Kamchatka; the Mon-Khmer, Annamese and Munda languages of southeastern Asia; the languages of the Eskimos and Aleuts; and numerous other language groups too numerous to mention round out the world's linguistic picture and the 2,796-language total.

To the average person, Kamchadal and Yukagir, Cheremiss and Votyak, Cambodian and Kachin, Chibcha and Arawak are mere names to be glanced at and forgotten. To the linguist, they are problems which often contain their own solution, along with the partial solution of that bigger, broader problem: "What is language?"

One final, major consideration may here be offered. There is no human group, however backward and primitive, that lacks speech. Like structural anatomy and functional physiology, language is among the fundamental proofs that all men are brothers under the skin.

PROBLEMS OF LANGUAGE
LEARNING

"Easy" and "Difficult" Languages

What is healthy to a Russian is death to a German.—Russian
proverb

No man fully capable of his own language ever masters another.
—G. B. Shaw, *Maxims for Revolutionists*

The process whereby a child learns his own language, first imper-
fectly imitating sounds, then words, then thought-concepts, has been
interestingly and thoroughly described by such famous linguists as
Jespersen, and need not be repeated here, all the more since its aspects
are largely non-controversial. On the other hand, the way in which a
half-grown or full-grown adult assimilates a tongue other than the one
with which he started out in life has of late given rise to acrimonious
debates that have overflowed the pages of professional journals and
found their way into the popular press and the conversation of cultured
laymen. A few remarks about the historical, and particularly the con-
troversial aspects of foreign-language learning may therefore not be
amiss.

It has been previously stated, and can never be sufficiently repeated,
that intrinsically there is no such a thing as an "easy" or a "difficult"
language. Every tongue, no matter how intricate it may seem to the
outsider who undertakes to learn it, is easy to its own speakers, who
have acquired it by the far-famed "natural" process—by imbibing it,
that is, since earliest childhood, by direct imitation of their elders, in
meaningful contexts, through a sequence of almost infinite trial-and-

error, at the rate of sixteen hours a day, seven days a week, fifty-two weeks a year, for all the years of their lives.

This sweeping statement is subject, however, to several qualifications. In the first place, it applies to the spoken tongue, but not at all to its written counterpart. The minute a language-learner, native or foreign, undertakes to learn the written form of his own or another language, features of intrinsic ease and difficulty will at once present themselves, ranging all the way from the absolute ease of a quasi-phonetic written system like that of Finnish, through various gradations of increasing difficulty in languages like Spanish, Italian or German, to the spelling complexities of French and English, and ultimately to the extremely difficult mnemonic features of ideographic systems of writing such as the Chinese. It may be emphasized that this characteristic of ease or difficulty in apprehending a language in its written form applies in equal measure to the native and to the foreign learner. The latter, if anything, has a slight advantage over the former, born of the possibility of comparing the system of the language he is learning with his own. In my early experiences with the intricacies of English spelling, for example, I found it a decided advantage to be able to memorize the written form of an English word in the phonetic pronunciation that such a written form would have had in my native Italian.

Secondly, the matter of a language's ease to its own speakers is subject to certain cultural restrictions inherent in the language itself. It definitely applies to the sounds of the language, its basic grammatical forms, and its vocabulary of common use. It does not apply to those more intellective, artificial features which find their expression in refined syntax and style and in an overextended vocabulary. All other things being equal (which they are not), a Bantu speaker will have a better chance of learning to speak Bantu perfectly than an English speaker of learning English in the same fashion, for the very simple reason that the Bantu vocabulary is far more limited than the English, and that English, in the course of its literary history, has developed certain intricacies of literary syntax which Bantu, perhaps luckily for itself, has never had a chance to elaborate. Here, however, we tread on dangerous ground, since the complexities of syntactic structure and

the vocabulary-range of supposedly inferior tongues are often such as to astonish linguists who chance to delve into them.

Since the feature of natural or inherent ease or difficulty is removed from the current spoken tongue of any given community, what is it that constitutes the element of "ease" or "difficulty" so often attributed to individual languages? What causes a high school student to say: "I'm going to take Spanish because it's easier than French or German," or an adult to remark: "My! How did you ever learn Russian? It's such a difficult language!"?

The answer lies in the purely subjective aspect of the individual background that each and every one of us begins to acquire from childhood. "We are creatures of habit" is a somewhat trite saying, but few of us realize to what a tremendous extent it is true. From the moment we are born (some say even before) we start acquiring habits, physical, mental and psychological, and these habits tend to become permanent and remain with us through life. They color all our future experiences with psychological reactions based on earlier experiences, which make us like certain things and dislike others, consider some easy, others hard.

Language definitely falls under this heading of habit. From earliest youth, we begin acquiring certain habits of expression, which include the utterance of certain sounds in preference to a far greater number of sounds which at the outset are potentially as easy to produce; the shaping of certain ideas into certain thought-and-language patterns in preference to others; and the attachment of certain semantic connotations to certain sound-groups which, however arbitrary at the start, gradually come to color our entire thinking with an almost indelible tint.

Viewed in this light, our habits, linguistic or otherwise, originally acquired at the cost of infinite pain, difficulty and experimentation, ultimately turn into a series of almost mechanical reflexes. Today, after driving a car for twenty years, I do not consciously think of my clutch, my brake, my gas pedal, my steering-wheel; but how consciously, even painfully I thought of them when I was first learning to drive! If today, after twenty years of driving, I were to direct my attention to a new but kindred activity, such as running a train, a street-car or an airplane, I would find it easier than if I had no knowledge whatever of guiding a vehicle, even though my transfer of mental habits might

occasionally lead me into error by mechanically causing me to try to operate the plane as I would a car. The more the new vehicle resembled a car in its mode of operation, the easier I would find it to handle; the more it differed, the harder it would be.

Here lies the crux of "ease" and "difficulty" with learning another language. The tongue will impress me as "easy" insofar as it runs close to my already established linguistic habits, and "difficult" to the extent that it diverges from them. Languages whose structural pattern, basic vocabulary, general mode of expression resemble those of English strike the English speaker as relatively easy, those which differ radically as hard. Germanic and Romance tongues, which have many points of contact with English, are normally the easiest for us to learn. But a Czech would find it easier to learn Russian than English, because Russian is closer to his own language habits.

Again, this matter of ease or difficulty, based upon previous linguistic habits, must be placed in the perspective of numerous other factors. Children can master, without apparent effort and with great fluency and a flawless accent, several languages at once, if they are in direct contact with their speakers. This seemingly simple mastery is, of course, predicated not upon the written, but upon the spoken form of the language, within its more ordinary conversational reaches. An English-speaking child can find written French difficult, just as he can find written English difficult. He can encounter difficulty in using involved Russian or Chinese syntactical constructions, just as he has trouble with involved English phraseology.

The problem of language learning is often misunderstood because it is too often oversimplified. "Learning" a language can mean a dozen different things to as many persons. It involves not one, but half a dozen diverse physiological and psychological processes. It is a matter of speaking, understanding, reading and writing, the four language-learning functions generally recognized by the pedagogues; but each of these faculties represents a complex of acquired abilities and functions. In speaking, we must control the vocal organs so as to produce the proper sounds, at the same time that we work with the memory, the understanding and the faculty of coordination. "Understanding" means at once a physiological process of accurate hearing and an intellective process of semantic selection. In both these processes the time element

is essential, while it ordinarily plays a minor role in reading and writing. But reading again brings into play the element of semantic selection and that of coordination, while writing calls for a power of memory and discrimination which appears nowhere else.

Too often the purpose of language learning is left unclear. Do we learn a foreign language because we are primarily interested in its literature? If so, it is the reading processes that will have to be stressed, with considerable attention devoted to the more abstruse portions of the syntax and vocabulary. Or do we want a facile conversational ability, permitting us to "order a beer in Singapore," inquire how to get to the railroad station, or demand a lower price for what is offered for sale? In this case, we must cultivate our ability to produce a few sounds, attune our ears to them, and concentrate on a given number of basic words and expressions. Or we may wish to gain a writing and translation knowledge of the foreign tongue, whereupon its spoken features again drop into the background, and its morphological characteristics come to the fore. Language teachers and others often speak somewhat glibly of a complete, well-rounded knowledge of the foreign tongue, the ability to converse in it fluently, to understand all that is said in it, to read it with facility, to write it gracefully. This, we beg to submit, comes close to being a life-time job, and is certainly not to be acquired in two years at the rate of three hours a week, or even in six months at the rate of eight hours a day. There should indeed be a striving for perfection, but perfectionism in language learning should be avoided, or at least tempered with the realization that the primary function of all language is to convey meaning, and that if that function is fulfilled, the means and methods may well be unorthodox, unconventional, or downright "incorrect."

Blunders in good English usage, perpetrated by cultivated scholars, are often on a par with those made by their own pupils in the foreign languages they are teaching and in which they expect perfection. They differ in degree, but not in kind, from such side-splitting errors as "this meat is too few," voiced by a Japanese restaurant waiter. Their basic significance, however, is that while linguistic ability for purposes of mutual understanding is relatively easy to acquire, perfection in the use of a language to which one is not born and which one has not

heard, spoken, read, written and studied from childhood is indeed a difficult attainment.

Once the intrinsically complex nature of the language-learning process is understood, it will be simpler to deal both with the problem itself and with the claims of those who assert that it can be integrally applied in record-breaking time with a complete duplication of the natural function, or who rail at immature and uninterested students for their lack of spectacular achievement in foreign-language learning.

The Traditional Way

And Frensh she spak ful faire and fetisly
After the scole of Stratford-atte-Bowe,
For Frensh of Parys was to hire unknowe.
—Chaucer

The history of foreign-language learning is almost as old as language itself. From the inception of semi-civilized communities, the need for linguistic transfer between two groups using different speech-forms must have made itself felt. The means taken to supply the need were probably of an extremely rudimentary kind—gesticulation, the picturing of objects, the production of sounds in imitation of those heard from the other group and known to convey a certain meaning.

With the growth of civilization, foreign-language learning and bilingualism grew. The latter is a more or less spontaneous phenomenon in border areas, and a person naturally bilingual makes, at least in theory, an ideal interpreter, translator and language teacher. Bilingual individuals were attached to the delegations sent to foreign powers by the Egyptian, Babylonian and Assyrian kings.

The records of ancient civilizations contain fairly frequent reference to language problems and their solution. What they are not too specific about is the method whereby one not naturally bilingual went about learning another tongue. It is probable that the various devices in use today appeared in one form or another in antiquity. Residence in a foreign country, with the learning of its language as a deliberately sought result or as a by-product, was operative then as it is now. Wealthy Romans had Greek imparted by teacher-slaves to their children and often to themselves; Cato the Elder is said to have learned Greek in this fashion at the age of eighty-four. The form of instruction seems to have been a blend of devices still in use—direct conversa-

tion, the study of grammar, the study of literature, exercises in speaking and in writing. Saint Augustine, Bishop of Hippo in Africa, who lived about A.D. 400, has left us in his *Confessions* an account of a method for learning languages which strongly resembles the direct method in use today. It is fairly certain that in the great period of Christianization and conversion, the missionary work that was carried on in the midst of non-Latin-, non-Greek-speaking populations had to be based upon a good conversational knowledge of the tongues of the groups concerned, for propaganda, religious or otherwise, defeats its own purpose if it is conducted in a language not readily accessible to those it is designed to reach. Phrase-books like the Glosses of Kassel, designed to enable Germanic speakers coming into Romance countries to speak a few sentences of common everyday conversation, are strongly reminiscent of the phrase-books issued to our own G.I.'s during the late war.

All through the Middle Ages and the Renaissance, people who desired to learn a living foreign tongue made shift to do so by one device or another. Latin, and later Greek and Hebrew, on the other hand, were officially taught in such schools as existed, and imparted by rigidly formalized methods, as befitted static tongues which were the depositories of ancient cultural treasures. It is perhaps fortunate, perhaps unfortunate that our official modern system of language learning, along with our views on grammar, came down to us straight from the old monastic schools of Latin, Greek and Hebrew.

Down to the eighteenth century, these ancient languages were the only ones deemed worthy of serious study. Queen Elizabeth is said to have been quite proficient in Hebrew, Aramaic, Greek and Latin. Governor Bradford, of the Massachusetts Plymouth Colony, was able to quote the Scriptures in the original Hebrew. When Harvard was founded, in 1636, the admission rules required that students be capable of understanding Cicero or any other Latin Classic on sight, and of speaking or reading Latin in prose or verse, and a favorite translation exercise during the early days of Harvard was from Hebrew into Greek. An early President of Yale delivered his commencement speech in Hebrew.

At the same time, the study of modern foreign languages was making modest headway. In 1608, French was already being taught in Maine by Catholic missionaries and nuns, but the beneficiaries of such

instruction were for the most part French Canadians and half-breeds, so that some doubt attaches to the value of the term "foreign-language instruction" in this connection. The same applies to the German taught in Pennsylvania about 1700 and the Spanish taught in Florida and the Southwest at an even earlier date.

The study of modern foreign languages in America may be said to have made its first official bow at Harvard in 1735, when students were permitted to substitute French for Hebrew (but not for Greek or Latin). Around the middle of the eighteenth century, a Philadelphia academy tried the novel experiment of offering French and German, while in 1779 the College of William and Mary established the first American professorship of modern languages.

It is indicative of the nature and growth of our American civilization that during the early part of the nineteenth century the only two modern languages that succeeded in gaining a firm foothold were German and French, with the former beginning to outstrip the latter around 1850, at the time of the great influx of German immigration, and holding a position of predominance in our high schools and colleges until the First World War, when French took the lead and Spanish began to be taught on a wide scale by reason of our new trade relations with Latin America.

Today, Spanish is the most widely studied modern foreign language in the United States, with French running close behind, and German a somewhat distant third. Other languages, Italian, Portuguese, Russian, Polish, Czech, Swedish, Norwegian, even modern Greek, Palestinian Hebrew and Esperanto, are offered in many American high schools, while our colleges and universities offer a much wider range, including such Oriental tongues as Japanese, Chinese, Arabic, Turkish, Persian, Hindustani, Burmese and Thai. In the words of a newspaper writer, "languages, like skirts, have their stylish ups and down."

Of particular interest for the purposes of this discussion is the method employed in foreign-language teaching. The nineteenth century was still dominated by the Classical tradition, and modern foreign languages were for the most part imparted by pretty much the same systems by which Latin, Greek and Hebrew had been taught at an earlier date and were still being taught.

This system had both its merits and its disadvantages. To begin with, there was a rigidly formalized presentation of grammatical structure, which was usually forced into a Classical mold. All the grammatical terminology of the ancient Greeks and Romans passed down unchanged into early grammars of French, German, and other modern spoken tongues. The height of the incongruous is reached in an Italian grammar of the late 1840's, in which Italian is said to possess the six traditional cases of Latin, which are set forth by the simple expedient of coupling the Italian indeclinable noun with the prepositions most appropriate for the genitive, dative and ablative functions, and by prefixing an exclamatory "Oh" to the so-called vocative.

Along with this, there was usually the presentation of a selected vocabulary, drawn from extremely literary sources, and, almost from the very outset, the literary sources themselves. It was not at all unusual in those days to find, in what purported to be an elementary textbook, reading and translation exercises based on Racine and Molière in French, Goethe and Schiller in German, Dante and Ariosto in Italian, Cervantes and Tirso de Molina in Spanish.

As for the conversational approach, that was generally conspicuous by its absence, save in such schools as were endowed with a student body to the majority of which the language was native. It was generally felt that the purpose of foreign-language learning was to assimilate the prescriptive grammar of the language, and then proceed at once to read its literature. If one wished to speak the language, he could learn that elsewhere—by foreign travel, or by contact with foreign speakers of his own choice.

It is fashionable today to deride the language teaching of the past. This derision is only partly warranted. It is quite true that by studying French in precisely the same fashion in which one studied Latin, one did not achieve any conversational proficiency in the language and found himself completely at a loss if called upon to speak or understand it instead of merely reading and writing it. It is also true that the constant hammering upon grammatical usage, syntactic structure, verb-conjugation and vocabulary produced a thorough, basic theoretical knowledge, which could often be expanded into a conversational knowledge with relative ease. An Italian minister of education, advocating certain educational reforms, once related to the Italian parlia-

ment the story of an Italian professor of the English language and literature (himself, as he disclosed at the end of his story) who finally went to England and found himself completely unable to understand or be understood by the English. He might have added, however, that if he had remained in England for a month, he would probably have begun to accustom his ear to English sounds, and would then have been able to cash in on his profound knowledge of English grammar and vocabulary. The oft-repeated experience of people who studied French in high school or college for five years, then went to France and found themselves unable to use their French irregular verbs in conversation usually leaves out of account the fact that the studying came to an end ten years before the trip to France, or that the trip was of the three-day variety.

In the first decades of the twentieth century, some sincere efforts were made to differentiate modern language instruction from Classical language methodology. Grammars began to try to present grammatical facts in some sort of natural sequence rather than in stylized, schematic fashion; literary models from three to six centuries earlier began to be replaced by more current offerings, and some attempt was made to offer a conversational presentation. That these efforts were not always attended by success is brought out in humorous fashion by a newspaper writer, who deplores the fact that his "conversational" French grammar contains such phrases as: "Nothing diverts me like a cat in the farmyard," "The number of parcels dispatched yearly to the provinces by the *Bon Marché* stores is one million," and "I have long sought an economical doll, wearing without blushing a print dress," whereas what he would like to learn to say is "Which way to the Black Market, *Monsieur le Gendarme?*" "Who is the blonde in the corner?" and "What's in the hash, Pierre?" An earlier critic of conversational grammars had deplored the fact that in the exercises his grandmother's parasol was forever being left on the gardener's chair among the flowers.

Another and perhaps more serious criticism of the language-learning process was based on the fact that many language teachers were very imperfectly trained in the language they taught, particularly from the conversational standpoint, and passed on their own errors of pronunciation to their students. It was to describe this old-fashioned

mode of language teaching, wherein pronunciation of a foreign language was imparted very sketchily, if at all, by a non-native teacher who had never been abroad, that the term *"esker-voo-zavay* school" was coined.

This situation prevailed quite generally down to the First World War, aided and abetted by the fact that a high school and college education was viewed as the prerogative of the wealthier and more leisured classes, who might be expected to cultivate a predominantly literary interest in the language they were studying; by our spirit of isolation and indifference to international affairs; and by a certain reluctance on the part of Americans to give serious consideration to foreign languages as a topic of study, or admit that they could really serve a practically useful purpose.

To this state of affairs there were, naturally enough, some noteworthy and praiseworthy exceptions. Many native teachers of German and French had come to our shores, and it was difficult for these people to become reconciled to the proposition that their languages were meant to be read and written, but not spoken or understood. Many of their pupils shared this feeling. Private academies often prided themselves upon imparting to their students, in addition to a foreign language's cultural values, also a speaking knowledge that would, if nothing else, add to their stock of social graces. A few public schools, particularly in localities where the German immigrant element was numerous, went in for the spoken as well as the written language.

On the other hand, even where these progressive sentiments prevailed, the burden of tradition was strong. The spoken language was too often imparted in its seventeenth- rather than its twentieth-century guise. Preoccupation with the finer points of grammar and syntax continued strong among the pedagogues, and was reinforced by an examination system based not so much upon what the student might be expected to know as upon what he might be expected not to know. As World War One came to a close, the American foreign-language scene was still largely dominated by formal grammar, translation of not too natural sentences, grammatical pitfalls for the unwary, and vast masses of stuffy, antiquated literary masterpieces reflecting conditions of life that modern American students could hardly be expected

to understand, let alone sympathize with. Language learning, by and large, was rather an examination-passing game than a serious attempt to learn languages.

Side by side with this academic machinery, however, there had been coming into being some non-academic organizations which frankly recognized the fact that a few people might actually desire to learn a foreign tongue for purely practical purposes. These schools had devised new and radical methodologies, many of which went perhaps too far in the direction opposite to that taken by the academic institutions. It was the avowed purpose of these schools to impart modern foreign languages in their spoken form, shorn of all philological or literary pretensions.

Chief among these institutions were the Berlitz schools, founded as far back as 1878. Their slogan was: "The eye is the enemy of the ear," and their method was to use only native speakers as teachers, forbidding the use of English, as well as access to the written form of the foreign tongue until the student had made considerable progress in the spoken version. The point of using native teachers is obvious: no incorrect or americanized accents can creep into the teaching. The native teacher, forbidden to use English at any step, points to objects as he names them, and acts out verbs while giving the foreign-language equivalent; a simple vocabulary is thus built up, and more complicated words and rules are then taught by means of this vocabulary. As for the avoidance of the written form of the language, and the Berlitz slogan, the point is more subtle. An American accustomed to giving certain spoken values to certain written vowels and consonants in his native English tends to give them the same values when he sees them in another tongue. In a word like Spanish *hora,* he will tend to sound the *h,* pronounce the *o* as in "go," the *r* as in "right," and the *a* as in "hurrah," whereas in Spanish the *h* is quite silent, the *o* is a monophthong, the *r* is trilled, and the final *a* is clipped. If the learner does not see the written Spanish word, he will not be tempted to make all these errors in pronunciation, but will simply imitate the correct sounds he hears to the best of his ability. His rendition of *hora* may be spoiled by his bad hearing, or by his inability to reproduce the exact Spanish sounds, but at least it won't be thrown off the beam by his unconscious flight into familiar English sounds for familiar English letters. The

Berlitz schools have at all times frankly avowed their purpose, which is to produce speakers of foreign languages, not literary scholars or precision translators, and their services are used every year by some twenty-five thousand people, a good many of whom have to go to a foreign country and must acquire a speaking knowledge of that country's language in a hurry.

Almost contemporaneous with the Berlitz schools were the earliest language recordings, first produced in 1895 by a Russian, Jacques Roston, for the teaching of French. In 1904 Roston founded in London the International Linguaphone Company, which came to America in 1929. Previously, however, language records had been produced in America by a German teacher named Rosenthal, whose product first appeared in 1910, and by Count Cortina, who produced Spanish records in 1914. Today, language recordings are available for at least fifty languages, including such unusual ones as Arabic, Malay, Chinese, Persian, Afrikaans, Hindustani, and even the Efik of West Africa.

The principle behind the recordings was similar to that of the Berlitz schools in that the spoken form of the language was stressed. Most recordings, however, were accompanied by printed booklets giving the written form from the outset. The great advantage of recordings was that they could be used for purposes of self-instruction where no native teacher was available.

These novel approaches to the language-learning problem generally left the academic system untouched. But in addition to serving an immediately useful purpose, they also supplied inspiration to progressive academic language teachers who came more and more to realize that there was a gap in their methodology which had to be filled. Above all, they inspired a group of youthful language scientists, who had been working for years on the problem of the precise nature and function of language without reference to its application to the learning process. How these scholars finally became interested in the application of their findings to the language-learning process of the average individual is an absorbing story, and one that well warrants a separate chapter.

The Innovators

*One can learn to speak and understand a language only by hearing
and imitating speakers of that language.*—Leonard Bloomfield

The study of language, as distinguished from the study of *a* lan-
guage, may be said to go back to the old Greek philosophers and gram-
marians, who speculated about the nature, origin and function of
speech. Their philosophical investigations in this field, however, proved
quite sterile, possibly because of the deductive logic which started out
with a hypothesis and sought to make facts fit it. The Middle Ages,
concerned with eternal, not temporal things, gave the problem of
language no thought, save where a language served as a tool in the
great process of spreading religious propaganda. It remained for the
Renaissance to resume speculation on language with the help of a new
eclectic, empirical, inductive point of view. Dante Alighieri, last of
the great men of the Middle Ages and first of the great men of the
Renaissance, was also the first to investigate the problem of language
in his Latin treatise *De Vulgari Eloquentia.* His keen observations
on the nature and origin of the Italian tongue and the classification of
the Italian dialects reveal an essentially modern scientific mind, basing
its conclusions on observation and correlation of facts rather than on
preconceived generalizations.

Dante and the men of the Renaissance who followed him (Nebrija,
Scaliger, Valdés, Estienne, Du Cange, Mabillon, and countless others)
were mainly preoccupied with the historical problem—how language
and languages had originated, and what their historical evolution had
been. This preoccupation lasted far into modern times; Bopp, the
Grimm Brothers, Diez were primarily historical linguists, tracing the
progress of language in the past. It was left for the late nineteenth and

early twentieth centuries to realize the full import of the other great aspect of language, the descriptive, or analytical.

So long as the linguist's primary concern was with tongues that had a known, recorded history, like the Indo-European and Semitic, linguistics remained perforce a handmaiden to history, philosophy, philology and literature. The study of the known history of languages could be put to no practical use save the very important but subsidiary one of casting additional light upon the history of peoples, literature and thought. It was only when linguists, athirst for additional information about their chosen topic, began to wander farther and farther afield, into the realm of unwritten, unrecorded tongues, where no historical research was possible, that the realization began to dawn upon them that language, after all, possessed another entrancing facet, one which made it a science in its own right, since in the descriptive study of unrecorded tongues there could be no question of literary or philosophical connections.

The descriptive study of language, as opposed to the historical approach, tends to place linguistics directly in line not with the humanities (philosophy, literature, esthetics), but with anthropology, psychology and sociology, as well as with such purely physical sciences as physiology and physics. Based upon language as it actually occurs in living speech, rather than upon documents illustrating its occurrence in the past, it opens up a new perspective to the investigator and places him squarely on his own.

The pioneers in this new field found themselves in for numerous and startling surprises. They quickly discovered that whereas the historically recorded languages, which had been the object of investigation heretofore, possessed certain inherent qualities, these qualities were by no means restricted to such languages, nor were they the only qualities that languages could have. A cursory examination of such tongues as those of the American Indians and the Australian aborigines revealed very promptly that the old grammatical concepts, once deemed universal, were in reality not at all so; that languages once thought to be as poor in modes of expression as were their speakers in earthly riches could in fact display a wealth of novel and significant concepts and forms such as to rival that of the best known Classical tongues; lastly, that all tongues, regardless of the cultural level of their speakers, had

certain features in common, and that these features could be reduced to a least common denominator and applied to language in general.

The scholars who devoted themselves to the rather thankless task of studying remote tongues found themselves up against what at first seemed insurmountable difficulties. The languages of most American Indian tribes, for example, not only possessed no recorded history; they did not even possess a written form. Under the circumstances, the traditional devices hitherto used in the study of European, even of Asiatic languages were utterly unavailable. There were no grammars of Choctaw and Kwakiutl to which one could refer, as one would in the case of Sanskrit, Latin or French, no written documents of the language from which a grammar could be painfully constructed, as grammars of ancient Egyptian and Akkadian had been constructed out of hieroglyphic and cuneiform inscriptions. There was only one thing to be done, and the language scientists did it. They secured native speakers of the language under study and by careful, patient questioning undertook to find out by what series of connected sounds they conveyed given meanings. These series of sounds, painstakingly analyzed, were then made to yield the individual words and grammatical forms of the language. Ultimately, grammars and dictionaries of Choctaw and Kwakiutl resulted.

Naturally enough, the immediate practical results of these investigations were neither startling nor widely known. Few people are interested in learning Kwakiutl and Choctaw. What the investigation did yield, in addition to specific information of interest only to professional linguists, was a methodology for acquiring information concerning any spoken language. Since, as a by-product of their work, the scientists learned the languages they were investigating, there was added also what amounted to a language-learning methodology, which was duly recorded in the professional journals and carefully stowed away for possible future use.

The nature of the languages thus studied, and the method by which they had to be studied, gave the investigators a certain point of view which is perhaps biased. Its most deplorable features are an excessive reverence for the spoken tongue and a corresponding disregard of, not to say contempt for, written versions, even where these exist and are of value in tracing a language's nature, history and affiliations; an exces-

sive regard for the phonetic portion of the language and a corresponding neglect of its semantic role; and a tendency to accept as the standard form of a tongue that which is common to the bulk of uneducated native speakers, rather than what is consecrated by tradition as "good usage."

This attitude, immaterial and even correct when applied to languages with no written form, known history or conventional grammar, leads to embarrassing situations when an attempt is made to direct it toward the languages of civilization. It is a little ludicrous, for instance, to assert, as does Bloomfield, in his book *Outline Guide for the Practical Study of Foreign Languages,* that if we want to find out what is the French equivalent for the English "has," we must peel out the form *"a"* from such spoken combinations as *ilalelivr (il a le livre), tyamaplym (tu as ma plume)* and *marilavy (Marie l'a vu).* After all, the equivalence of French *a* and English "has" is something that was discovered many centuries ago, and is recorded in all French grammars, and we do not need to subject ourselves to the painful and lengthy experimentation with spoken sentences that would be necessary if we wished to discover the Comanche instead of the French equivalent of "has."

The statements made by some of the linguistic scientists are such as to arouse extreme controversy at the same time that they reveal their basic philosophy of language. Two of them, for example, make the assertion that "everyone who is not deaf or idiotic has fully mastered his native language by the end of his fifth year, no matter how difficult or complex it may seem to strangers." Obviously, what they mean is "has fully mastered the *sounds* of his native language." Not only no child of five, but not even any intelligent, cultured adult knows all there is to know about the grammar, syntax, vocabulary or semantics of his own tongue. But in the minds of these writers, "language" is synonymous with "sounds."

Other writers of this school claim that "a language is what people speak, not what someone thinks they ought to speak." This gives *carte blanche* and free play to all slang, colloquialisms and substandard forms, which may or may not be desirable at any given point of time or space.

On the other hand, the very intransigence of the linguistic scientists

on behalf of the spoken, popular tongue and its importance, as against the written literary version, served as an effective and salutary counter-poise to the century-old excesses of the traditional purists, grammarians and litterateurs. It stressed the fundamental role played by speech in semantic transfer, even when that speech is based upon officially "in-correct" forms. Last of all, it pointed the way to a long-needed reform in language-learning methodology.

The great opportunity for the linguistic scientists came with the Second World War and the government's real or fancied desperate need for large numbers of people who could speak and understand the myriad languages with which our soldiers came in contact all over the globe. A large nucleus of linguistic scientists had grouped itself at an earlier date around the American Council of Learned So-cieties in Washington, where their views concerning the potential importance of little-known languages and the new methodology to be applied to language learning had met with a favorable reception. It was to the A.C.L.S. that the government ultimately turned in its search for people who could direct the teaching of many languages, in a brief period of time, and for exclusively practical, military purposes, to a large number of members of the Armed Forces destined for special overseas service.

The linguistic program devised by the A.C.L.S. for the Army Specialized Training Program was quite revolutionary. It may be described as a deft blend of the old Berlitz direct system, the mechanical aids originated by Linguaphone, but expanded to the full potentialities of twentieth century science, the most important innovations long ad-vocated by progressive academic language teachers, and some radical, controversial features introduced from the new methodology developed in the study of unwritten tongues.

It is calculated that linguistic instruction in about fifty foreign tongues, some, like French, German, Spanish, Italian, already quite familiar to the American public, others, like Thai, Burmese, Fanti, Hausa, Pushtu and Korean, never before studied in America on any considerable scale, were imparted by the Army Specialized Training Program and kindred organizations to perhaps one hundred thousand members of the Armed Forces. In addition, phrase-books and phonographic recordings in these languages were prepared and widely

distributed among other members of the Forces for purposes of self-instruction and immediate practical use.

Though some of the features of the Armed Forces Language Program were quite controversial, the impact of the Program as a whole upon public opinion was enormous. Popular newspapers and magazines that had never before seen any news value or dramatic merit in foreign languages began to play up the "miraculous" results attained in the Army Program, and to draw odious comparisons with what had been previously achieved in academic language courses. Traditional language teachers, nettled by these comparisons, sprang to their own defense. Soon a battle royal raged all over the country concerning the merits and demerits of the new systems which, some of the critics pointed out, contained precious little that was new, outside of boundless government subsidies poured into a language-learning program.

The true test of the new methods was, naturally, to come after the war, when it would be applied to normal peace-time high school and college programs without the benefit of government support. Before examining the outcome of this test, it may be worth while to see precisely how it differed from traditional methods.

Army language courses were, first of all, of the intensive type. Instead of teaching a language at the rate of three to five hours a week for two years, they concentrated language study into a six- or eight-week period, at the rate of eight to twelve hours a day. This, of course, meant that the soldier-students did nothing else; they lived, worked, ate and even slept, so to speak, in the foreign language they were learning, undistracted by any other course of study or activity. In addition, the absolute number of hours spent on the language was greater than in the normal academic course, though concentrated into a much shorter period of time. Secondly, the number of students per class was severely limited to ten or twelve at the most, instead of the twenty to forty of the usual academic class. Thirdly, the acquisition of conversational skill was stressed, to the partial exclusion of reading, writing, composition or literature. Fourthly, conversational practice and drill were imparted exclusively by native speakers, who were not necessarily, or usually, teachers, while grammatical instruction was left to trained teachers who were not necessarily natives, but had some knowledge of the systems of the linguistic scientists. Lastly, mechanical

aids, phonograph recordings, radio broadcasts, foreign language movies, soundscribers and mirrorphones were used to the full. All this, coupled with the fact that only carefully screened students with a previous linguistic background and a high level of intelligence were accepted for enrollment in Army language courses, and that the soldier-students believed, right or wrongly, that promotion and preferment depended upon their proficiency in acquiring the foreign tongues, led to generally excellent results, particularly for the purpose at hand, which was to create people who could speak and understand the foreign languages rather than know all about their literature, history, or fine points of grammar.

The main criticisms of Army language methods in their application to ordinary peace-time learning appear in the next chapter. For the present, suffice it to say that the Armed Forces Language Program opened up new vistas in the realm of what could be attained under ideal conditions. None of the devices used was, strictly speaking, altogether new. It was their combination and application on a hitherto undreamed-of scale that startled the language world out of its ancient complacency.

With the close of the war and the end of the government's need for numerous language specialists, the Army Specialized Training Program passed out of existence. Its lesson, however, was not lost. Progressive educational institutions began to install, in modified form, the more practical of its features. The conversational aim supplanted, in some measure, the old reading and cultural objective.

Today, most colleges and universities in the land are in the process of experimenting with various modifications of the intensive language course, imparting foreign tongues in concentrated doses to relatively small student groups, with stress on conversation, and with abundant use of native speakers and mechanical apparatus. Cornell, which has created a unified language department composed largely of linguistic scientists who were prominent in the Army Program, applies the "Army method" in its entirety. One of its recent experiments has been to conduct a course in Hindustani for some twenty modern language teachers, mainly for the purpose of showing them, by putting them at the receiving end of an unfamiliar language, what their own students' reactions are. Yale, which specializes in Oriental languages,

favors recordings of native speakers, with listening-booths, earphones, and record-players equipped with start-stop and backspace pedals, and it is claimed that at the end of one semester of a language like Chinese, the students have a vocabulary of one thousand spoken words and two hundred written characters. Soundscribers and mirrorphones, the first of which records speech, while the latter plays back words spoken into it, are in general use for self-correction of students' pronunciations. Other institutions make it a point to hold debates on current events conducted entirely in the foreign languages. Language schools like Middlebury had, even before the war, a system whereby students and their native instructors are isolated for specified periods of time in residence houses where they are put on their honor to use nothing but the language under study, thus obtaining approximately the same results that would be forthcoming from living in a foreign country.

The high schools have been slower in following the lead of the Army Program, but in those of New York City special early-morning conversational classes are held for students who wish to supplement the more theoretical information they acquire in their regular classes, and the response is not merely encouraging, but enthusiastic.

In sum, it may be said that a good many of the innovations for which the Army language programs were at least in part responsible are here to stay. Shorn of all secondary details or debatable points of methodology and linguistic philosophy, they may be described as leading in one main direction—away from the traditional study of stylized grammar and antiquated literary models, and toward the conversational approach whose chief purpose is to make the learner speak and understand.

THE REACTION: IN DEFENSE OF GRAMMAR

Grammar is the logic of speech, even as logic is the grammar of reason.—Trench

In the face of the onslaught of the linguistic scientists and its accompanying fanfare of publicity, traditional and progressive language teachers alike stood at first silent—some of them aghast. Then timid voices began to be raised, growing ever louder and more insistent.

"More time and smaller classes? That's what we have been fighting for in vain for years! Give us eight hours a week and ten students to the class, and we'll do better than the Army!" said some.

"Conversational skill? Just what we have been cultivating in our students!" said others. "After all, how about all the people in America who *can* speak and understand foreign languages? They are *our* products!"

"Native speakers? Aren't we native speakers?" remarked the qualified many. "Don't we cultivated Frenchmen, Spaniards, Germans and Italians know and speak the languages better than barbers, bartenders and waiters?"

"Recordings, soundscribers, foreign movies, radio programs?" said the rest. "Haven't we been begging our administrations to put them in for the last twenty years? And haven't we always been told that we'd have to wait until the new gymnasium was built, or until the chemistry laboratory was fully equipped?"

Many pointed out that results at least as satisfactory, though not so spectacularly advertised, had been attained for years in institutions where the students were screened as to I.Q., instead of being indiscriminately admitted just because they fell into a certain age-group. If educational administrations had been willing or able to pour into

language teaching one-tenth the funds lavishly bestowed by the Federal Government on the Army Program, others insisted, there would have been no need for the Army Program. Still others pointed to the fact that the methodology of the Army Programs had been almost bodily lifted out of Berlitz, Linguaphone, Middlebury and the schools of anthropology.

However justified these counter-claims may be, they leave the root of the matter largely untouched. The question of priority in the discovery and application of a new method is on a par with an academic debate as to whether Ericsson or Columbus discovered America. From the practical standpoint, the important thing is that America was discovered. The point at issue, if any, is that the intensive Army Programs did more to shake language learning out of its traditional habits and complacency than any of the unpublicized evolutionary innovations that had silently crept in during the years between the two wars.

More fundamental were the criticisms directed by a few thoughtful language scholars at the new methodology itself, as well as its applicability on a universal scale to academic language learning.

Taking the second point first, it was pointed out that a true duplication of Army Program conditions could never occur in peace-times, for lack of time, funds, teachers, equipment and pupil-interest. This objection is more easily disposed of than appears possible at first glance. Granted that one cannot expect Army Program standards to prevail universally in peace-times, there is no trouble about setting them up as an ideal goal. If a school cannot allow its pupils to devote thirty-six hours a week to language study, it can nevertheless raise the hours from three or five to six or eight. If classes of ten are not possible, classes of twenty may be; they are surely an improvement over the old-style class of forty. If all the native-speaker and mechanical apparatus of the Army cannot be afforded, perhaps it will be possible to equip the institution with a few sets of recordings, and bring in an occasional foreign speaker. Far from being hindered in their attainment of these desirable objectives by the Army experience, progressive language teachers will be aided by its example, which can be cited to administrators to prove what can be accomplished.

It is rather the desirability of the conversational objective *per se*

that lends itself to discussion and debate, along with the educational psychology and linguistic philosophy that underlie it.

During the war, we wanted people who could learn in a hurry to speak and understand the more common reaches of a foreign tongue for intensely practical purposes. Is that precisely what we want today?

The reasons for undertaking language study in peace-times are many and varied. Some people want to learn a language in order to do what our soldiers did in war-times: go to a foreign country and get by with a minimum of intelligible oral exchange. But a good many others want languages purely as a cultural or research tool, to be able to read scientific books and periodicals, or works of literature, or commercial tracts. For these people, is the conversational approach the best? Is it not in part a waste of time for them to labor to acquire a native accent? Will it avail them more to have a reading or a speaking knowledge of the foreign tongue? It is true that the one can be converted into the other, with a little time, patience and hard work, but which has a better chance to survive in the post-school years, when the former student is forced to turn his attention to other tasks—the spoken tongue which he has no occasion to speak or hear, or the written tongue, which he can cultivate in his spare time with a minimum investment in books?

It must not be forgotten that languages, like everything else, promptly fall into oblivion if they are not constantly practised. People who wonder why they don't remember the high school French they studied twenty years ago should quickly examine their consciences to find out how much high school algebra, chemistry, physics, or even American history and civics they can recall. Spoken languages are often forgotten by their own native speakers, if they are not practised. How much chance, then, does a high school or college student have of retaining a conversational course, with its five thousand-word vocabulary and five hundred-sentence list, unless bad fortune sends him to Europe on a third world war while the knowledge is still fresh in his mind? Will not the intellective process of learning a language's grammatical structure for reading and cultural purposes have a better chance of survival than the series of mechanical reflexes involved in the learning of colloquial phrases?

It is a fact well known to psychologists, though often ignored by

spoken-language advocates, that some people learn better through the ear, others through the eye. Some students are confused by the written form of the foreign language, but others find it impossible to reproduce sounds unless they have their written representation before their eyes. The eye can be the most powerful ally of the ear, as well as its enemy. The linguistic scientists, recognizing this fact, broke away from the Berlitz tradition to the extent of giving their students an English or a phonemic transcription of the sentences they taught them by ear through native speakers. The value of these transcriptions was doubtful. The English ones, equating foreign to English sounds, served to perpetuate English accents (KEY AIR OWE BAY BEAR for Spanish *quiero beber* gives you almost as bad a rendering as if you were to try to figure out the Spanish pronunciation for yourself). The so-called "phonemic" transcriptions, on the other hand, proved in part too complicated for the students, and led to great confusion later on, when the actual foreign spelling had to be imparted. Students who had become accustomed to *invuziverapa* as the written representation of a series of French sounds found it difficult indeed to recognize these now familiar sounds when they saw them under the guise of the official French *il ne vous y verra pas*. All in all, the attempt to circumvent the hurdle of the discrepancy between spoken and written language in those tongues where the latter exists was anything but a brilliant success.

The deification of the native-speaker accent on the part of the new methodologists was almost as ludicrous as the earlier veneration of minor grammatical points and literary models by the traditionalists. It is a familiar fact that people can speak English quite acceptably even though they do so with a foreign accent. It is also well known that a strong slang or dialectal native accent can prove as unpleasant and partly incomprehensible as any immigrant dialect. Under the circumstances, the preoccupation of the linguistic scientists with native-speaker perfection in the matter of sounds struck many as an exaggeration. Their proneness to use substandard native speakers, often with a dialectal taint, was almost as widely criticized. It was felt by a good many men, not all of them traditionalists, that it would be better to have a class trained in speaking Italian by an American-born instructor who knew his correct Italian grammar and vocabulary than by an

illiterate Sicilian who would be laughed at in any section of Italy but his own.

Another, more far-reaching point of criticism in connection with the mechanistic learning of phrases by direct imitation was the following: there is a "language" ear just as there is a "musical" ear. Some people are born imitators of sounds, others are not. The ones that are will profit immensely by conversational practice with native speakers, even to the point of being mistaken for natives. But there is nothing more humiliating than to be told you sound like a native when you speak, and then have to remain speechless because your knowledge of the tongue is limited to a few words and phrases learned parrot-fashion. Language is only in part a matter of sounds; far more, it is a matter of grammatical structure and, above all, vocabulary. The acquisition of sounds is only the first step in the acquisition of a foreign language. Hence, excessive concentration on sounds, to the detriment of structure and vocabulary, is hardly desirable.

Last, but far from least, is the objection advanced by some historical linguists and grammarians to the linguistic philosophy of the linguistic scientists, particularly their attacks on traditional grammatical terminology. While the terminology of Greek and Latin is not applicable to all the languages in the world, it is applicable, with appropriate modifications, to the principal western modern tongues—French, Spanish, German, Italian, Russian, even English. Hence, the attempt to break down formal grammar and replace it with a new system based primarily upon spoken forms was deplored. There is hardly any point, for instance, to trying to sidestep the subjunctive by calling it the "unreal" form of the verb, or to relabelling masculine, feminine and neuter nouns as *"der, die* and *das*-nouns," or to using the name "form 3 of the noun" instead of "dative case" or "indirect object." There is even less point, in the familiar languages, to trying to peel a grammatical form out of a series of spoken sentences when the grammatical form is already perfectly known, or to indulging in any of the dozens of time-wasting processes developed by the linguistic scientists in the course of their investigations of obscure languages.

The grammatical order prevailing in Greek and Latin, and passed on by those languages to those of the modern western world is to some extent symbolical of mental and even of social order. Most of the

sloppy and confused thinking of today can be traced to the abandonment of the principles of order in the teaching of languages (particularly English) in the schools. The trained, logical minds of the past, which we occasionally admire and the absence of which we occasionally deplore, were firmly anchored to principles of order, in sociology as well as in language.

As a result of all these considerations, acceptance of the full methodology of the innovators has been rather slow. In the last chapter it was pointed out that many academic institutions have gone over to the conversational objective. In this chapter, it is well also to add that numerous schools and colleges, after going over to that objective, have reverted in part to their traditional methods, with only a semblance of innovation left in their courses.

This is praiseworthy to the extent that it demonstrates a spirit of healthy caution and direct experimentation with new points of view. It is deplorable insofar as it represents a reversion to smugness and indolence. The latter trend is exemplified by an experience in textbook publishing. A publisher, weary of French readers based on antiquated nineteenth-century short stories, decided to bring out a new type of book, containing twenty pieces, each written by a leading contemporary French writer. The book sold twenty thousand copies the year it came out, but only five hundred the following year. The reason for its rejection after a preliminary trial was that it had proved itself "unsuited for our educational system." This means that, in the minds of the people in charge, it is not the language-teaching system that must revise itself to keep pace with the foreign language, but the foreign language that must remain static in order to fit the antiquated educational system. The absurdity of this proposition is manifest, but fundamentally it is no more absurd than the system itself, whereby languages have been taught for years on the basis of outworn methods and models.

Can a balance be struck between the requirements of tradition, which demand that we hold on to what is worth retaining in our cultural heritage, and the demands of progress, which urge us to move on with the times and bring our language-learning ways up to date? It is our belief that the two can be reconciled.

THE IDEAL WAY?

When we are understood, we always speak well, and then all your fine diction serves no purpose.—Molière

If there is one thing on which all schools are agreed, it is that the best way to learn languages is from birth, or as close to it as possible. The experience of bilingual or polylingual countries like eastern Canada, Luxembourg, Switzerland and many border regions of Europe bears out this contention. The ability of young children to imitate and reproduce sounds, words and phrases is unparalleled in later life, when habits have become set. Consequently, language teachers of all descriptions heartily endorse the teaching of foreign languages at as early an age as possible, when they can really be absorbed in the "natural" way. Encouraging steps in this direction have been taken in some of our southwestern States, like New Mexico, Arizona and California, where in many elementary schools both English and Spanish are taught on a basis of parity from kindergarten on. In Texas, the same two languages are imparted from the third to the eighth grade to over a quarter of a million children. The child who grows up in a bilingual atmosphere usually retains his two or more "native" languages for life, and speaks, understands, reads and writes them with equal facility. This system of language learning is even more prevalent abroad. The Soviet Union, to cite one example, teaches English to seven-year-olds *via* the Mother Goose rhymes, from which the students later graduate to Tennyson and Shakespeare.

The child way of learning languages is ideal—for children. Whether it is suited for adults, or even for high school students, is another question. Language habits, including both the preference for a certain set of the many sounds of which the human vocal apparatus is capable,

and habits of thought, whereby certain linguistic patterns become the "natural" representatives of thought-patterns (actually, they are not natural, but acquired) usually become set about the individual's tenth year. Beyond that point, language learning becomes not a natural experience, but a mental chore. The new language is definitely a "foreign" one, and is treated as such by its recipient. New sounds and phrasings are in conflict with sounds and phrasings already established in the learner's consciousness, and the latter set up a natural resistance to the newcomers. The faculties of imitation and retentive memory are not so keen as they were formerly, possibly because with the broadening of the individual's experience more and more of his mental pigeon-holes become filled.

On the other hand, oncoming maturity confers upon the individual a new faculty which he previously possessed in far lesser measure, the faculty of generalization and the concomitant power of logical deduction. He is now able to establish in his mind a general principle, and then proceed to apply it to specific situations. This is the faculty which is superlatively called into play by normative grammar, which calls for a mental transfer from a general proposition such as "a noun is the name of a person or object" to its application in "book is the name of an object; therefore book is a noun," or "first-conjugation infinitives in Latin end in -*are,* which is changed to -*o* for the first person singular present indicative" to "*amare,* 'to love,' is a first-conjugation infinitive; therefore, if I want to say 'I love,' the proper form for me to use is *amo.*"

Note that this conscious mental process is not at all in conflict with the unconscious one whereby *amare* and *amo* are acquired as separate forms from use in given contexts. In fact, the connection between the two may work in either direction. One may use *amare* and *amo* in given contexts until the realization dawns upon him that one means "to love," the other "I love"; or he may first learn the rule and then consciously apply it until the application in given situations becomes a reflex. The child does it far better the first way; the adult, particularly if he is highly endowed with the intellective faculty, may very possibly find it easier to do it the second way.

Berlitz schools, direct methods, and linguistic-science principles make no allowance for this possibility. They essentially apply the child

standard to the adult. Another thing they overlook is the time element. The child normally has more time and greater possibility of repetition in which to do his learning. The adult is often pressed for time. This consideration applies also to the high school or college student. The American high school-system normally allows two years, at the rate of three to five hours a week, for the learning of a language. It is obviously impossible to approximate in that space of time the experience of a child who learns one or more languages at the rate of all his waking hours per day for many years. Foreign countries generally make greater time allowance for the language-learning process, allotting from four to eight years to it, which permits them to apply the natural method on a more natural basis.

In actual practice, it is a known fact that the results achieved in learning a foreign language at the adult stage by any method whatsoever, including the direct, the grammatical, even the one which involves foreign residence or prolonged contact with foreign speakers, are far from perfect. Language learning involves the acquisition for use of a few unfamiliar sounds, but they are seldom acquired to perfection. It also involves an endless task of memorizing innumerable words, phrases and structures, and for this chore of the memory there is no short-cut or substitute. There is even, sad to relate, a law of diminishing returns that is operative in language learning. The learner may at first make very encouraging progress in the acquisition of sounds and words, but sooner or later he will reach a point where additional practice, study and memorizing seem to lead to very little in the way of additional facility.

This being so, one is tempted to wonder whether, short of the ideal conditions for child-learning, there has not been too much perfectionism on the part of the language experts. Those of the old grammatical-literary school insisted that the student should become thoroughly familiar with fine grammatical distinctions and little-used words which many natives did not know and had no use for. Spoken-language advocates, on the contrary, thought perfection lay in the perfect reproduction of sounds, forgetting that those same sounds are often imperfectly uttered by a good many of their own native speakers.

A few experiences come to mind in this connection. One former colleague of mine used literally to dance with glee every time he was

able to find an obscure rule or word on which he could stick his pupils in an exam. He utterly forgot the purpose of language teaching, and turned it into a cross-word puzzle game. Fortunately, there are few of his kind left.

For what concerns native-speaker perfection of sounds and intonation, another episode is enlightening. I was once visited by a man who displayed ability in several languages. I finally asked him where he had been born, and when he replied, "Brooklyn," my surprise must have registered on my face. "You are wondering about my foreign accent in English?" he smiled. "I speak all my languages with a foreign accent. I think it lends distinction."

Long experience with native speakers reveals that they often diverge, sometimes quite deeply, by reason of dialectal area of origin, educational standards, and vocal equipment. It also reveals that the student can be misled by the ear as easily as by the eye, particularly if he is the visual rather than the auditory type. I have at times found it impossible to make a student reproduce a foreign word correctly, no matter how many times it was repeated for him by the native speaker, until the written form was presented to his eye.

The conclusion that one is forced to draw after examining the claims of the various rival schools is that there is no one ideal method, applicable to all persons and suited to all purposes. Above all, there is no royal road or short-cut to language learning.

There is, however, a possibility of combining several features of the methods in existence so that first things may come first and not last, and the greatest possible results may be achieved as near the outset as possible. Some important recent findings in connection with languages are the following:

1. While every language has a complicated grammatical structure, it has also a basic grammar, composed of elementary rules of broad application, shorn of all pettyfogging exceptions and exceptions to the exceptions. This basic grammar should be presented first. Whenever the attempt to do so has been made in the past, the carping criticism of "incompleteness" has been made by grammatical perfectionists. "But he devotes only one page to the subjunctive and its uses!" shouts a critic in connection with a basic twenty-page presentation of fundamental Italian grammar. The subjunctive is not really necessary for

elementary semantic transfer. It is far more important that the learner should speak from the outset, even using indicatives where subjunctives should be used, than that he remain tongue-tied until he has reached page 293 of the complete grammar. Traditional French grammars were overwhelmingly preoccupied with the correct way of saying "your book and mine," or "your book and the one of my brother," and consequently brought in the complicated rules for the use of possessive and demonstrative pronouns at an early stage. But one can get along for a long, long time by saying "your book and my book," or "your book and the book of my brother." Up-to-date grammars realize this fact and relegate *le mien* and *celui* to the posts of relative obscurity they hold in the spoken tongue, even though they do supply splendid material for pitfall questions on examinations.

2. It was long ago recognized that some words in a language tend to occur with greater frequency than others. It was naturally desirable that such words be learned first and practised longer. Educators drew up frequency lists of words, but made the mistake of basing their statistics on the occurrence of the words in literary models instead of in actual real-life conversation. The result was that "prince" and "fairy" often found their way into high-frequency lists, while "toilet" and "beefsteak" did not. The frequency lists are now in process of drastic revision on the basis of conversational occurrence.

3. A very recent discovery is to the effect that almost half of the spoken, colloquial language tends to run into clichés—ready-made phrases and expressions like "How are you?," "It's a fine day," "Where are you going?" A list of about three hundred such expressions, stressed, repeated and memorized at the very outset, will not give the learner real control over the language, but it will confer upon him that imaginary control which is so important in building up self-confidence and destroying tongue-tied inhibitions. Again, these phrases do not occur in literature with the same frequency with which they occur in real life, but they can be singled out and listed by the simple expedient of eavesdropping on street or subway conversations.

4. From the standpoint of the spoken language, the main thing is to get the learner to speak. Many language teachers recognized this fact, but they made the mistake of forcing the students to speak on literary or kindred topics, and of interrupting them for correction each time

they made a mistake. After a short time, the students were afraid to open their mouths, lest they open them the wrong way. The new system is to put the students on their own in a life-like imaginary situation, and letting them play the role of themselves, while the instructor takes on the part of a native with whom they converse, and who is far too polite to correct them, at least while the conversational exchange is in progress. The only requirement is that they make themselves understood. Otherwise, they are allowed to consult dictionaries or even one another, as tourists would. There are no inhibitions, no restraints, no holds barred, provided semantic transfer is accomplished, which it usually is.

The devices described above apply equally to grammar, reading and conversation. They permit all three approaches at once. They are, of course, only an initial step, something designed to aid the language-learning process in the period of its inception. As to the subsequent steps, they should depend largely on the interests and purposes of the individual learners, and it is at this point that educational institutions might well offer parallel courses, some stressing the colloquial tongue, others the literary, others the commercial, technical or scientific, with a rounding-out of grammar appropriate to each case.

Whichever road is taken, it must again be stressed that the way to perfection is long and arduous. The acquisition of a basic vocabulary of two or three thousand words is relatively easy; mastery of a thirty thousand-word vocabulary, approximating that of a fairly cultured native speaker, means ten times the effort. Basic grammatical rules can be simplified; their involvements and exceptions cannot, and if one is to acquire the same effortless proficiency in handling a foreign tongue that he possesses in his native one, long hours of study and practice will be required. Speaking a language so that a native will understand you is one thing; speaking it like a native is an entirely different problem, and one that is very seldom solved by a foreigner.

Language, however, is fundamentally the transfer of meaning, which is normally feasible, while perfection is not of this world. If language learners and language teachers will hold these two facts in mind, the problem of language learning will be greatly simplified.

CHAPTER I

THE TRANSLATION PROBLEM

Interpreting is not everybody's art.—Luther

"Egad, I think the interpreter is the hardest to be understood of the two!"—R. B. Sheridan, *The Critic*

The Biblical account of the Tower of Babel, which many accept literally, is probably the first recorded instance of man's longing for an international, universal tongue. Like many other things that man longs for in vain, this particular boon was at first freely vouchsafed by a bountiful Providence, but later withdrawn because of man's own misuse of it.

When man realized that he could no longer communicate with his fellow-man by reason of the confusion of tongues, he began to seek ways and means of circumventing the will of his Creator. Translators, interpreters, and schools of language were the outcome. The shortcomings of the last named have just been described. The inefficiencies and insufficiencies of the first two are at least equally disheartening.

The Italians have a saying about this: *Traduttore—traditore* ("A translator is a traitor"). How true this is, even in a literal sense, transpires from one or two examples in the diplomatic field. Our State Department is said to have been at one time vastly disturbed by a note received from the French Government, which began: *Nous demandons.* "What right do they have to demand that?" said the irate officials. Then it was pointed out that the French expression had the more modest meaning of "we request." If the account is true, it was the fault

of the original translator that we almost had a diplomatic break with France. More recently, at the UN, there was considerable dither over a passage describing the threatened collapse of western Europe as "brutal." This was a literal rendering of the French *brutal,* but the tension lessened when it was explained that in idiomatic usage the French word corresponded much more closely to the English "serious."

Translating and interpreting require a perfect command of two languages, and most of us do not command even one. Dictionaries are of limited help, because most words in one language have a dozen possible translations in another, which means that to use a dictionary properly you must first have command of the two languages, in which case you are not too likely to need the dictionary.

What can be accomplished with dictionaries, or with a literal knowledge of equivalent words, is illustrated by a couple of cases. A French teacher once got in a composition the expression *plateau de frêne,* which on the face of it means "container made of ash-wood"; after racking her brain for a time, it finally occurred to her what the student had meant; he had sought "ash-tray" as two separate words, and had correctly gotten both. On another occasion, an English bridge-player was trying to explain to an Italian kibitzer that he had a "leg toward rubber." It came out, literally enough: *"Ho una gamba verso la gomma,"* but what the puzzled Italian got out of it was: "I have a limb toward the eraser."

Besides, what is one to do with "untranslatable" words? It was discovered in the course of UN gatherings that French has no real equivalent for "trusteeship," Chinese no way of expressing "steering committee," Spanish no way of distinguishing between "chairman" and "president." But even without going into the specialized language of diplomacy, what can one do with such current German words as *Stimmung, Gemütlichkeit, Weltanschauung,* with French words like *éclat* or *demi-tasse,* even with English words like "pet" and "to miss"? They can all be translated after a fashion, but "domestic animal" will never carry the true meaning of "pet," any more than *le echo de menos* or *sento la sua mancanza* carry the full import of "I miss him." An expression like the American "How much is he worth?" leaves the translator floundering, and gives the foreigner mistaken notions of intellectual or moral qualities. During the war, the Italians got one

of their few laughs out of the literal translation of the British "Home Fleet" (*Flotta di Casa*), which sounded like a domesticated tomcat. No word-list is long enough to give all the possible meanings of the ubiquitous English "get."

When it comes to technical, commercial or literary translations, the situation is even worse. Each technical field has its own linguistic domain, and the would-be translator of a technical document must command that technical field as well as the two languages, under pain of sending out disastrously wrong directions for the use, say, of machinery. The commercial language must be based on coincidence of consuming-habits as well as on satisfactory translation. When the Coca-Cola concern hired a staff of linguists to translate "Have a coke" into fifty foreign languages, all they got was a series of national forms of greeting; the literal rendering of "Have a coke" would simply have made no sense. In the literary field, a critic scornfully points his finger at an English translation of the intensely dramatic *"Stabat Mater,"* and remarks that "when something great has been said in Latin, it has been said once for all."

The problems that arise in connection with translation are infinite. Shall the author of a book translate passages quoted from a foreign tongue, or not? One critic says of an author that "he translates his quotations, so that his readers are embarrassed neither by his learning nor their ignorance." But there is widespread controversy on this point.

What to do with slang and colloquialisms? Lose their racy flavor by translating them into correct terms, or seek equivalent colloquial expressions in the foreign tongue? When George Gershwin's "Ain't Misbehavin' " was beamed to Russia, it was very unimaginatively rendered by "I don't do anything bad"—proper and correct, but hardly flavorful.

To what extent should untranslated foreign expressions be allowed in connection with things in common use, such as restaurant menus? One journalist, tired of *entrecôte bonne femme* and *raie au beurre noir,* voices a serious complaint about "chow cards in ancient Gasconese," and admits he would like to eat without having to show a Berlitz certificate. But how would he anglicize *bouillabaisse* and *cassoulet?*

If one decides to translate, the question of overlapping meanings comes up for solution. English "wish" is French *désirer* if you wish

something, but *souhaiter* if you wish someone something. English "engineer" is Italian *ingegnere* if you mean a civil engineer, but *macchinista* if you mean the engineer on a train, as the Italian war-bride of an American G.I. who claimed to be an "engineer" found out to her disappointment. "Fire" is *fuoco* if you mean fire in the absolute, but *incendio* if you mean a fire to which firemen respond. Conversely, German and Russian find it difficult to make a real distinction between "national" and "popular" (the proper translation of *Volksepos* has sometimes worried me). French uses *serviette* for "towel," "napkin" and "briefcase." Spanish *esperar* means both "to hope" and "to wait," and Italian *piano* means "piano," "softly" and "slowly." Even Latin *altus* means both "high" and "deep." A French professor always brought grins to the faces of his students when he inquired whether those in the "bottom of the room" could hear him; French *fond* normally means "bottom," but *le fond de la salle* is "the back of the room."

The use of the proper word-combination in translation is an art in itself. In English you "pay" a visit, but in the Romance languages you "make" it. In English you "take" a walk, but in French you "make" it and in Spanish you "give" it. In English you "take" an examination, but in Italian you "give" it, in French you "undergo" it, in Spanish you "suffer" it.

Idiomatic expressions are, of course, what they are. The Russian "How much to you of summers?" or the Spanish "How many years have you?" impress us as peculiar renderings of "How old are you?" On the other hand, "The child is two years old" sounds quite funny to Romance or Slavic speakers; how can a child of two be "old"? A "round-trip" ticket is incomprehensible to Romance speakers, who wonder what can be "round" about a trip; they use "ticket of going and coming." A simple, idiomatic, semi-colloquial expression like "playing hookey from school" has the following renderings, among others: a French boy "goes to the bush school"; an Italian boy "salts away" or "pickles the school"; a German boy "goes behind the school"; a Russian boy "hoboes the school"; a Turk "avoids the school"; a Chinese "hides from school"; while a Spanish boy "plays the calf." Anyhow, "school" is etymologically "leisure," "unemployment" or "free time."

Deceptive cognates, like the *demander* and "demand" of our earlier

episode, or words that merely sound or look alike, have ever proved to be pitfalls to translators. *Large* in French means "wide," while Spanish *largo* is "long." *Lard, figure, douche, marine, crayon, plume, billet, coin, travail, placard, sale* and *type* are good English and good French, but in French they mean "bacon," "face," "shower," "navy," "pencil," "pen," "ticket," "corner," "work," "closet," "dirty" and "guy," respectively. *Gift,* a pleasant word in English, is "poison" in German, while *Lust* is quite harmless, and means pleasure. *Burro* is "donkey" in Spanish, "butter" in Italian. An uncle of mine, travelling in South America, got himself into a ludicrous situation when he asked for *due uova al burro;* the Argentinian waiter went to great pains to explain to him that donkeys don't lay eggs—at least, not in Argentina. The Italian *sale* looks like the English "sale," but means "salt." My grandfather, on his arrival in this country, wondered why so much salt was advertised in the kind of stores where one would least expect it to be sold. *Merci* means "freight" in Italian, "thank you" in French. A French traveller coming to Italy for the first time remarked that the Italians must be an extremely polite people, since they had "Thanks" in big letters on all their freight-cars.

The question of words for which there is no equivalent in another language was forcibly brought to the fore in UN debates. The Russian translators could find no precise Russian counterpart for "jurisdiction," and finally had to rest content with a six-word circumlocution. The Chinese had to coin over one thousand new words at the San Francisco Conference alone, while more recently they worked out "atom bomb" as "origin-matter shot," and "genocide" as "man-sheep (*i.e.,* human group) butcher-kill." The UN finally had to establish a program of linguistic research to devise dictionaries of exactly equivalent words and phrases in its five official languages.

Some much more serious aspects of the translation problem, however, have come to light in the UN. It was ascertained, for instance, that to translate into the five official languages the twenty million words spoken in the course of a seven-week meeting of the General Assembly, one hundred million sheets of paper had to be used. A one-hour English speech made by a delegate is estimated to require four hundred man-hours put in by 124 different persons before it can be permanently recorded in English, French, Spanish, Russian and Chinese. It takes

on the average three translators eighteen man-hours to get an English speech into Russian, and one translator thirty man-hours to put it into Chinese.

The reaction of students who attended the UN proceedings was that these were insufferably slow, mainly by reason of the translations that had to be read, which retarded the work tremendously, and caused everybody to fall asleep, including the original speaker. Mrs. Eleanor Roosevelt had previously made a similar observation, and had remarked that it would be a wonderful thing indeed if a single language could be used which would be understood by all the participants.

There is nothing novel about either the observation or the desire. Both have been expressed on countless occasions before. An international language eliminating the translation problem and all its attendant troubles has been envisioned for centuries. Such a language would at one stroke do away with all the linguistic difficulties encountered not only by diplomats, but by technicians, scientists, missionaries, immigrants, business men, tourists and students. It would place within the reach of all, without linguistic restriction, the world's science, literature, political thought, channels of trade and general population. It would mean an end to the innumerable difficulties and delays by which men are beset as soon as they set foot beyond their own borders.

Is this solution of the world's translation-problem and linguistic woes capable of achievement, particularly at this time, when modern means of communication have obliterated distances and made all the peoples of the earth potential next-door neighbors? What language, national or constructed, already in existence or yet to be created, would be suitable for the purpose? Before undertaking to answer these questions, it will be well to examine what has been proposed and what has been accomplished in the past, both on a limited and on a world-wide scale.

Universality and Internationality, Limited

Long Friday number one piccininni belong king belong you and me 'e marry.—From Pidgin English account of wedding of Princess Elizabeth, published at Lae, New Guinea

What may be described as a limited form of linguistic universality has long since been achieved in several fields. One often hears of the "international language of music," the "universal tongue of mathematical symbols," the "internationality of the language of science." The first is, of course, a figure of speech when it is applied to the appeal that music makes to all human hearts, whatever the color, race or nationality of their owners. There is also, however, a more literal application of the expression, for what concerns musical notation, directions and terminology. In antiquity, each nation had its own form of musical notation, but from the eleventh century on, thanks chiefly to the inventiveness of Guido d'Arezzo, a monk who lived in Italy but was probably of French birth or origin, our present system spread to all civilized lands until it is now indeed internationally used. The first six notes of Guido's scale, *ut, re, mi, fa, sol, la,* were taken from the initial syllables of the first six lines of a Latin hymn to St. John the Baptist; the addition of *si* and the replacement of *ut* by *do* were later developments. Thanks to Guido's scale, a musician of any land can today read or play any composition from any part of the world. As for musical directions and terms, these are ninety per cent derived from Italian, the language that was first applied to the art of *il bel canto*. While not quite so widespread as the use of the notation (German music often bears directions in German) this terminology is internationally known and used. Not only musicians and singers, but even laymen throughout the world are acquainted with the meaning of *basso, contralto, tempo, falsetto,*

staccato, ritardando, con amore. Two of many musical terms that offer
linguistic curiosities are *glissando,* which is a hybrid compound of
French *glisser* ("to glide") and the Italian gerund ending *-ando,* and
solfa, which is the combination for vocalizing purposes of two notes
of the scale, but which Italian applies to any rigmarole, musical or
otherwise.

However much we may admire the universality of the musical
system, we cannot but be impressed by the fact that it is devised to
serve one branch of human activity, and one only. The attempt made
by Jean-François Sudre in 1817 to create an international language
based on musical notes was a complete failure. A "musical Esperanto"
devised recently to avoid conventional vocalizing uses pleasant-sound-
ing nonsense syllables, but it can by no stretch of the imagination be
termed a language.

Greater universality attaches perhaps to the system of mathematical
notation and terminology in use throughout the civilized world. The
Arabic numerals are very much in international use. So are Euclidian
terms, as well as astronomical, chemical and other symbols used by
specialists in their respective fields. Of particular interest are the sym-
bols of the chemical elements, which are based on abbreviations of
Latin or Greek names (Na for *natrium,* the Latin name of "sodium";
F for *ferrum,* Latin for "iron"; Pb for *plumbum,* Latin for "lead"; Hg for
hydrargyron, Greek for "water-silver," or "mercury"). Inspired perhaps
by the international use of such symbols, a group of Massachusetts
Institute of Technology scientists is at present actively engaged in an
attempt to reform the scientific terminology of the major languages, so
that they may all have corresponding terms. To give a very elementary
demonstration of their procedure, the binary compound which is desig-
nated in English by the suffix *-ide* ("sulphide," "chloride," etc.) ap-
pears in Italian as *-uro* (*solfuro, cloruro*). If the suffix *-ide* or an easily
recognized variant like *-ido* were adopted by Italian, or *-ure* by English,
the confusion caused by these dissimilar endings would cease. In addi-
tion, many words which differ completely in two or more languages
could be brought together in form. This system is devised to serve
only scientific terminology, and would not touch the everyday portion
of the various vocabularies. But an extension of the principle has
already been proposed, whereby semi-technical words such as "radiator"

might be brought into line in the various tongues, thus leaving an ever-shrinking residuum of native terms for the learner to acquire. In the matter of "radiator," French uses *calorifère* ("heat-bearer," from Latin roots), while Italian prefers the Greek *termosifone*. There is no intrinsic reason why English could not accept *calorifer* or *thermosiphon,* French *radiateur* or *thermosiphon,* or Italian *radiatore* or *calorifero* (the latter term is actually used in Italian side by side with *termosifone*). In this fashion, it is claimed, the international vocabulary of science and technology would gradually be extended to cover an ever-greater segment of everyday life, and the world's diverging languages become more and more similar. Without entering into a discussion of the merits of the system for what concerns purely scientific terminology, it may be remarked that the extension of the scientific vocabulary would meet popular resistance at every step, and would not at all solve the question of ordinary international understanding, particularly of the spoken-language variety.

The language of abbreviations is another excellent example of universality, limited. Such forms as *ca., n.b., e.g., i.e., viz., vs., etc., et al., lb., oz.,* represent abbreviations of Latin words or expressions; degrees and titles like *Dr., Prof., L.L.D., M.D.* are of the same nature. Perhaps the most widespread international abbreviation is the "&" or "ampersand" (*and per se and*), first devised in 63 B.C., along with some five hundred other abbreviations which continued to be used in manuscripts for over one thousand years, by Marcus Tiro, a precursor of Pitman and Gregg. While most of the Tironian shorthand symbols eventually dropped out of use, the "&" still survives in several hundred languages. The *Q.E.D.* of mathematics (*Quod Erat Demonstrandum,* "which was to be proved") and the R$_x$ and $\overline{aa}$ of druggists' prescriptions (the former is *recipe,* "take," with the subjoined symbol of Jupiter, which looks somewhat like a handwritten 4, but got changed in the course of centuries; the latter is for the Greek *ana,* "of each") are also part of our Classical heritage, and remind us that at one time Latin and Greek were in truth universal, international tongues.

More modern abbreviations that have gained international currency are in the nature of "alphabet soup." UN, UNRRA, UNESCO, ECA are internationally known, though not everybody knows pre-

cisely what they stand for. USSR stands for an English translation of the Russian SSSR, but is accepted even by the Russians; so is USA, though it stands not only for United States of America, but also for United States Army and Union of South Africa. Then there are all the syllabic or alphabetic abbreviations that have turned into international words, like *Gestapo* (originally *Geheimstaatspolizei,* "Secret State Police") and *Ogpu* or *G.P.U.* (for *Gosudarstvyennoye Politicheskoye Upravlyeniye,* "State Political Administration"). Among English abbreviations that have acquired some measure of international currency are O.K., B.O., I.Q., P.D.Q. and T.B.

The language of abbreviations is indeed international, but it can also be misleading. If you happen to be in a Romance country, do not turn on the "C" faucet to get "cold" water. "C" on faucets stands for "cold" in English, but for "hot" in the Romance languages (French *chaud,* Spanish *caliente,* Italian *caldo*).

There is another sort of limited internationality that has already been achieved, represented by standard tongues which in the past have gained currency in certain areas and have served as media of linguistic exchange among people using different speech-forms.

The role played by Latin and Greek in the ancient and medieval worlds is well known. In Classical antiquity, these two languages, ranged side by side, sufficed to care for the total needs of western civilization. It is rightly pointed out that during the so-called Hellenistic period Greek was the universal tongue of the eastern Mediterranean basin to such a degree that it served as the vehicle for the bulk of the New Testament. Latin, on the other hand, held sway over the west long after the fall of the Roman Empire. As the language of western Christendom and western scholarship, it was continued in international use until the Renaissance was well over. As late as the seventeenth century, international business was still carried on in Latin, and Grotius, when he wished to clarify international law, did so in Latin. Cromwell used Latin for his international correspondence, with a young man named Milton serving as his Latin secretary. As late as the nineteenth century, it was still fairly common for works of scholarship to appear in Latin, and those who claim that Latin is a dead language might well ponder on the English

use of such words as "quota," "memorandum," "agenda," "maximum," "medium," "data," "onus," "bonus," and "prospectus."

It is a fascinating hypothesis that the very dualism of the two great Classical languages may have led to their downfall as international tongues. The death of Latin as the language of western diplomacy and scholarship did not come to pass until Greek had been rediscovered. But aside from such fanciful speculations, one may also point to the fact that as the spoken vernaculars began to make headway, they very naturally tended to usurp the throne held by the ancient tongues. In the thirteenth century, as a result of the Crusades, in which France played such a leading role, the French language enjoyed a European vogue that made it, in the words of some historians, a "universal vernacular of Christendom." Dante, at the outset of the fourteenth century, speaks of his rejection of Latin for his *Divine Comedy* as due to his desire to obtain a wider audience, including the ladies, who could only be reached through the vernacular.

The rise of the national tongues has often been ascribed to the new, rising spirit of nationalism. But it is as often forgotten that the use of the vernaculars and the concurrent decline of Latin preceded nationalism, at least in its modern interpretation, by many centuries. There is more likelihood in the theory that it was the growing participation of the surgent bourgeois class in the affairs of the mind that robbed scholars and churchmen of their ancient linguistic prerogatives. In the century that followed the reflowering of the Ciceronian tradition under Cardinal Bembo, and while Grotius continued to use Latin, Comenius made the revolutionary pronouncement of advocating modern tongues for international use, Russian for the east, French or English for the west. It was this same seventeenth century, incidentally, that saw French forging ahead of the other western languages by reason of military and political predominance, and beginning to occupy the role of the tongue of polite international intercourse that it still holds in part today. The use of English as an international language of trade and of German as an international language of science are comparative newcomers to the field, and their dominion has never won the general cultural acceptance that greeted French in the eighteenth century.

There is a possible parallel with the dualism of Greek and Latin

in the tripartite role that these three great modern languages have played in recent times, and there is more than a hint that they may have acted as a check upon one another. With Spanish, Russian, and even Chinese entering the field as possible contestants, the emergence of one national tongue as the international language of the world seems more remote than ever.

Without any claim to universality, various semi-artificial tongues, partly the result of chance, partly of deliberate intent, have fulfilled the role of international languages in limited areas.

Some, like the *koine,* which supplanted the ancient Greek dialects, and the Malay of Indonesia, have managed to acquire the dignity and functions of national tongues. Others were curious literary devices, like the Franco-Venetian of the Middle Ages, created for the purpose of conveying the French *chansons de geste* to a population speaking another, but not too widely different, Romance language. The majority of these limited international tongues consists of the various pidgins in use throughout the world today.

Being a product of necessity pure and simple, and revealing crude, elementary processes of simplification, including baby-talk, most of these tongues are regarded with scorn by all but professional linguists. Yet they are international tongues in embryo, with perhaps a touch of universality and, in the case of many, with definite literary strivings.

Among the oldest recorded pidgins is the *lingua franca* of the Mediterranean basin, a conglomeration of Italian, Arabic, French, Greek and other languages, devised by medieval navigators and traders to supply a means of communication among multilingual populations in a state of constant war-like and peaceful interchange. It is common in *lingua franca* to find an Arabic verb-root with an Italian verb-ending, or a sentence consisting of five or six words, each taken from a different source (the same thing occurs in the modern pidgin of Hawaii, where English, Chinese, Filipino, Hawaiian and Japanese are intermingled in a sentence like *Me kaukau adobo opu itai,* "I have a stomach-ache from eating fish"). Yet attempts at literature and poetry in *lingua franca* were made by its users, with not too unpleasant results. Had some great literary genius taken up *lingua*

franca seriously, it is likely that we would have today a masterpiece in that hybrid tongue.

The Hausa and Swahili of Africa, the first of which serves as a medium of common intercourse for the populations of the Gulf of Guinea, the second for the eastern part of the Black Continent south of Ethiopia, seem to have been in origin pidgins concocted out of the numerous local dialects. But Africa has also many pidgins based on European languages. Afrikaans is in origin seventeenth-century Dutch which became semi-pidginized by use with the South African natives. It, too, turned into an official and literary language at the time of the Boer War.

The pidgin French varieties of West Africa and New Caledonia, the Gumbo, or Creole French of the Louisiana Negroes, the pidgin Portuguese of India, Zanzibar and Singapore, the Nigre-Tongo of Surinam in Dutch Guiana, called *taki-taki,* or "talkie-talkie" by the natives, the Papiamento of Curaçao, whose Spanish origin is easily ascertained (*kore poko poko* means "go very slowly"), the various American Indian pidgins of North America, which have given us such distorted English forms as "paleface," "heap" and "fire-water" along with the more indigenous "wampum," "squaw," "moccasin" and "tepee," are all samples of international languages deliberately devised for limited use. So are the many immigrant dialects now gradually dying out in the United States and other Western Hemisphere countries, like the *cocoliche* of Argentina, which is a perfect compromise between two already kindred languages, Spanish and Italian.

These languages of limited international currency point out a moral, and some linguists have not been slow to grasp it. If a tongue like Franco-Venetian or *cocoliche* can be created to serve speakers of kindred languages, why not others, on a more ambitious scale? Why not a universal Romance, or a universal Germanic, or a universal Slavic, reversing the historical process whereby the languages of these groups were formed out of the fragmentation of Latin, early Germanic and early Slavic?

The Slavs, suffering perhaps from an inferiority complex due to the neglect their languages have suffered from language builders in the past, are at present hesitating between a national tongue like Slovak,

which, by reason of its geographically central position among the Slavic languages, is described as an ideal common tongue for all Slavs, and an artificially created Slovan, based on 440 root-words common to all the Slavic languages, and endowed with a simplified grammar also common to all, and a phonetic spelling.

But at this point the problem logically and legitimately reenters the broader field of world-wide currency. Why bother with a language, national or artificial, which will merely have wider acceptance than the languages it replaces? Why not give the problem an integral solution while we are about it? Why not create, devise or select a language that will truly be universal and will serve all nations and all men without restriction or exception?

Universality by Artifice

That language is the best which, at every single point, is easiest to the greatest possible number of human beings.—Jespersen

While Latin prevailed, there was no question of another international language. It is hardly an accident that the identical seventeenth century that witnessed Comenius' revolutionary pronouncement and the gradual ascent of French also gave rise to the first attempts at artificial, constructed languages. Sir Francis Bacon is said to have suggested a written system similar to that of the Chinese ideographs, which were then just beginning to be known in Europe. But this, even had it met with acceptance, would have represented only an international writing code.

In 1629 the philosopher Descartes outlined a scheme for a constructed language based on numbers that would represent words and notions. This suggestion, coming from one of the greatest minds of the period, really set the artificial language machinery in motion. Within a few decades, half a dozen international language systems sprang up, differing from the original ones in that they were meant to be spoken as well as written. Dalgarno's system, presented in 1661, consisted of an ingenious arrangement of Latin and Greek vowels and consonants, in which the first consonant of a word gave the key to the broader classification of the object denoted, the following vowel brought it down to a more restricted class, and so on. Almost at the same time, Bishop Wilkins offered, for philosophical writings, a set of symbols somewhat similar in appearance to those used in mathematics, but having spoken values. Practically contemporaneous were the international languages devised by Francis Lodwick (1647), Thomas Urquhart (1653) and Cave Beck (1657). The last-named used in writing

combinations of letters and numbers, the numbers being replaced by spoken sounds in actual speech. A sentence like "Honor thy father and thy mother" appeared in writing as "leb2314 p2477 pf2477," but was read *"lebtoreonfo peetofosensen piftofosensen."*

As was quite natural, none of these systems, despite the fact that they were widely discussed, encountered success. To begin with, they were meant to be aristocratic languages for the use of philosophers and scholars, the very people who, having a broad linguistic culture, needed them least. Secondly, they were based upon an *a priori* foundation of logic and principles of philosophical perfectionism, quite at variance with the nature of language, which is neither logical nor perfect. Lastly, in a world still largely dominated by Latin and in which the national languages were beginning to make themselves strongly felt, there was little chance of acceptance for artificial newcomers.

Between the time of Bacon and the present day, it is estimated that some five hundred attempts, in round numbers, have been made to construct artificial tongues for international use, a few extremely ingenious, the majority of them at best unimaginative blends of existing tongues or of previously devised systems. The early nineteenth century saw, among others, Sudre's attempt at a language based on musical notes. The late nineteenth century had a galaxy of forgotten tongues, including such picturesquely named ones as Bopal, Spelin, Dil, Balta, Veltparl, Langue Bleue and Latinesce. The twentieth century has continued the tradition, with Idiom Neutral, Novial, Ido, Interlingua, Interglossa, Ro, Occidental, Arulo (later renamed Gloro), Monling, and a host of others.

Of all these many constructed tongues only two, Volapük and Esperanto, have met with some measure of success. The first, constructed by Monsignor Schleyer around 1880, had roots based mainly on English and Latin-Romance, with a grammatical structure strongly influenced by its inventor's native German. The word "Volapük" itself comes from the roots for "world" and "speak," both taken from English. The beginning of the Lord's Prayer in Volapük reads as follows: *O Fat obas, kel binol in süls, paisaludomöz nem ola; kömomöd monargän ola; janomöz vil olik, äs in sül, i su tal.*

The rising green star of Esperanto, the "language of hope," gave Volapük its death-blow. The tongue constructed by Dr. Zamenhof of

Poland in 1887 presented the advantages of extreme grammatical simplicity coupled with a fair degree of logic, utter ease of sounds, absolute correspondence between the spoken and the written form, and a vocabulary based mainly on the Germanic, Greek and Latin-Romance elements of Indo-European. The Esperantists claim that their tongue is today the only living interlanguage, and their claim is substantiated by the fact that it has several million flesh-and-blood speakers scattered throughout the earth. In addition, Esperanto has gained a measure of official acceptance. Along with Latin, it is the only language which by international agreement must be accepted in telegrams throughout the world. It is used by international associations of doctors, teachers, lawyers, scientists and musicians, and by collectors of coins and stamps. Many business houses issue Esperanto catalogues of their products for foreign trade, and Esperanto tourist literature is issued by some tourist associations and by several governments. More than one hundred newspapers and magazines in Esperanto are published throughout the world, and Esperanto programs are frequently broadcast by foreign radio stations. In 1921, the British Association for the Advancement of Science pronounced that a constructed language like Esperanto is better for international purposes than either a dead or a modern tongue.

In view of these facts, it may be worth while to examine the basic structure of Esperanto, a simple task, since the grammar of the language can easily be condensed to fit into a single page. The Esperanto alphabet, which uses Roman symbols, has only one sound for each symbol. It omits *q, w, x* and *y,* and uses a circumflex accent over *c, g, j, s* and *h* to denote the sounds of *ch, zh, j, sh* and *kh,* and a breve-mark over *u* to indicate the sound of *w.* The accent of Esperanto is always on the next to the last syllable. The definite article is always *la.* All nouns end in *-o,* with a plural *-oj;* all adjectives in *-a,* with a plural *-aj;* all adverbs in *-e;* all infinitives in *-i.* The present of all verbs ends in *-as,* the past in *-is,* the future in *-os,* the imperative in *-u.*

Esperantists challenge people to test their own intelligence by offering them brief reading passages, which they claim anyone can understand. Here is an untranslated sample: *La inteligenta persono lernas la interlingvon Esperanto rapide kaj facile. Esperanto estas la moderna, kultura lingvo por la internacia mondo. Simpla, fleksebla, praktika*

solvo de la problemo de universala interkompreno, Esperanto meritas vian seriozan konsideron. Lernu la interlingvon Esperanto!

The success of Esperanto aroused other interlinguists to redouble their efforts. In 1902 an academy of Volapük experts devised a radical simplification of their tongue, which they rechristened Idiom Neutral. The simplification process can be gauged by comparing the passage from the Lord's Prayer given above in Volapük with the corresponding passage in Idiom Neutral: *Nostr patr kel es in sieli, ke votr nom es sanktifiked; ke votr regnia veni; ke votr volu es fasied, kuale in siel, tale et su ter.*

Just as Idiom Neutral is an offshoot of Volapük, Ido is an offshoot of Esperanto (Esperanto uses the suffix *-ido* for "descended from"; would-be improvers of Esperanto called their new language Esperantido, which was shortened to Ido). Somewhat similar to Esperanto is Novial, an artificial tongue devised by the great linguist Jespersen.

An interesting return to Latin was presented by the Italian linguist Peano in his Interlingua or *Latino Sine Flexione* ("Latin Without Endings"). In presenting it before a congress of linguists, Peano began his report in perfect Classical Latin; as he spoke of dropping the various endings, he actually dropped them in his reading; at the end of his report, what had started out as Classical Latin turned into "Endingless Latin."

Interglossa, devised by Hogben, author of *Mathematics for the Million* and editor of *The Loom of Language,* consists of Latin and Greek roots combined with a Chinese system of syntax. It may be remarked in connection with it that the system of Latin and Greek roots is not always easy even to those who use them in ordinary conversation; how many people who use "heterodyne" and "microphone" are able to analyze the former into "other" and "force" and the latter into "small" and "sound"? The Chinese syntax, on the other hand, presents its own peculiar drawbacks, as illustrated by *mi pre kine topo tendo un acte re,* literally, "I past go place purpose a do thing" ("I went there in order to do it").

Latecomers to the international language field are Monling, whose chief claim to fame is the exclusive use of monosyllabic words (*ling 't top pai ken ad ploi, il klar top bon* is Monling for "The language easiest to learn and use is obviously the best"), and the still incom-

pletely formulated Interlingua devised by I.A.L.A. (International Auxiliary Language Association), a New York organization which is attempting to evolve an international language based on English and Romance; a sample of the tentative language thus far advanced, which is constantly being modified on the basis of questionnaires sent out to prominent linguists, is the following: *L'unita' quel permise action comun por le bono comun e contra le periculo comun es le sole metodo efective per quel, in tempor de pace, le nationes queles ama le pace pote garantir-se securita' e progreso ben regulate con liberta' e justitia.*

In addition to these true constructed languages, based on both writing and speech, one may also mention exclusively written-language codes which continue the tradition of Bacon and Descartes. The ingenious Gibson Code, compiled by a Coast Artillery officer, uses only numerical symbols. Nouns start with 1, 2 or 3, verbs with 4, adjectives with 5, adverbs with 6, pronouns with 7, conjunctions with 8, prepositions with 9; verb-tenses are indicated by adding 10, 20, 30 to verbs; while even-numbered endings on nouns indicate the plural and odd numbers the singular. In Gibson Code a sentence like "The boy eats the red apple" would read as follows: "5 – 111 – 409 – 10 – 5 – 516 – 2013." This does not differ too much from cable codes in commercial use, and has, unfortunately, the same limited application; it also fails to take into consideration structural diversities in the different languages of its prospective users. Sir Denison Ross, not too long ago, revived the Baconian plan of using Chinese ideographs internationally, but the limited use of such a system is obvious.

The major charges that are usually levelled against constructed languages are: 1) that they are "artificial"; 2) that they are not really "neutral," since they lean to one or another of the great language families; 3) that if adopted, each nation would tend to pronounce them with its own accent, so that in a short time an entire series of new languages would spring up.

The first of these charges is, of course, no charge at all. Granting the artificiality of a language like Esperanto in contrast with the natural qualities of languages like English or French is like granting the artificiality of an automobile as against the naturalness of a horse. Artificiality can be, and generally is, an expression of the human intellect, leading to an improvement over nature for the purpose at hand.

"Neutrality" is another overworked expression. As rightly pointed out by Hogben in his Interglossa, what will it avail the Zulus to have in a truly neutral constructed language two or three words from their own tongue, which is all that their numbers or importance would warrant? The fact that constructed languages are usually heavily weighted in favor of the great languages of civilization instead of endeavoring to give proportional representation to all the myriad language-groups of the earth is an argument in their favor.

The third criticism is one that is easily met with a knowledge of linguistic history. Languages tend to break up into local dialects under conditions of isolation and lack of communications. When the factors that make for political, educational and commercial unity are strong, it is rather the opposite process that takes place—dialects tend to vanish. Those who point to the breakdown of Latin into the Romance languages after the fall of the Roman Empire should look also at the earlier picture of the spreading and standardization of Latin over a vast multilingual area when conditions were favorable for the process of unification.

There are two additional criticisms of international languages, constructed or otherwise, which are not so frequently voiced, but which deserve, perhaps, greater consideration than the ones enumerated above.

The first is that an international language, once adopted, would soon displace the existing tongues and eventually obliterate them. That this threat is serious is evidenced by the fact that all international language advocates, without exception, go to great pains to inform us that their creations are not at all meant to replace national tongues, but only to complement them for purposes of international communication.

The other point of criticism deals with the basic philosophy and methodology of the interlinguists. The older ones among them, including all the seventeenth-century scholars mentioned at the outset of this chapter, and more recent ones down to Schleyer, were overwhelmingly preoccupied with logical perfectionism; as philosophers and logicians they could not conceive of an artificial product that would not be fully and completely logical and in accord with what the scholars of those days viewed as the universal, God-given system of linguistic and grammatical structure. Modern interlinguists, from Zamenhof on, swinging to the other extreme, seek not logic, but ease of learning.

Their major preoccupation is how to make their creation readily accessible to the world's masses, by a simplification of grammatical structure which runs to the extreme of Chinese syntax, and by the selection of a vocabulary that will be most readily acceptable to the greatest number of people. It might fairly be remarked that we have moved from one swing of the pendulum to the other—from the concept of an aristocratic, philosophical language devised for the world's intellectual *élite* to that of a democratic, all-embracing tongue that will be favored by the world's masses. We still have perfectionism with us, but it is perfectionism of a different, more modern variety.

These two points of criticism are far too fundamental to be taken up in detail until we have examined the other wing of the international language movement—that which advocates the international use of a natural, national tongue like English, revised and modified in such a way as to meet the needs of a multilingual world.

UNIVERSALITY *VIA* LINGUISTIC IMPERALISM

Here you have a very carefully wrought plan for an international language, capable of very wide transactions of practical business and interchange of ideas.—-Winston Churchill (Speech advocating Basic English as a world tongue, Sept. 7, 1943)

The only possible alternative, if one wishes to achieve an international language without recourse to artificial devices, is to adopt one of the existing national languages. Considering the number and variety of the latter, the only difficulty should be what the French call the *embarras du choix*. Which of the many shall we select?

As often as this question arises, the situation begins to resemble a national party convention at which each State delegation persists in voting for its own favorite son. Prominent Americans and Englishmen like Mrs. Roosevelt and Churchill somewhat naively cry out: "By all means let us have an international language! And by all means, let that language be English!" Unfortunately, speakers of other languages entertain precisely the same sentiments with respect to their own national tongues. Discussions, begun in an academic spirit, often turn acrimonious; or at best, they are transformed into panegyrics on the merits of the various languages, their extent, their phonetic beauty, their grammatical simplicity, their literary achievements, their commercial or political importance. Not only the world's big languages, English, French, Spanish, German, Russian, Chinese, present their own candidacy, but even smaller languages, like Finnish or Swedish, are proposed on the same grounds by which dark horses are offered at political conventions.

Convincing people of the superior merits of a language other than their own is on a par with persuading them that the pies produced by

Mrs. Jones, whom they don't know, are better than those mother used to bake. Language is, after all, a very integral part of a people's way of life. A proposal to interfere with it can rub a sore spot second only to that created by interfering with people's religion.

An old lady of my acquaintance, knowing that I knew a few languages, would ask me how one said "bread" in French, Spanish, Russian, etc. Then, after listening attentively, she would shake her head and say: "But why do those people go to all that trouble? Wouldn't it be far simpler and easier for them to say 'bread'?"

More important than pointing out the advantages of the leading national candidates for the post of international language (which has all too frequently been done) is the task of pointing out their disadvantages—the difficult sounds of French and Chinese, the ponderous verbal apparatus of Spanish and Italian, the structural complexity of Russian and German. Of prime importance is the thankless chore of pointing out the drawbacks of English to American readers, who are all too prone to follow the mental pattern of the old lady in the story.

Yet before we do that, it may be well to review the advantages of English by placing it in juxtaposition with its leading national rivals. No other language with the exception of Chinese has so many speakers; no other language with the exception of French has its speakers so strategically distributed all over the globe; no other modern language has shown such mighty capacities for extension, growth and colonization; none wields such far-flung political and economic power; none has at its command such enormous means of linguistic propaganda, of which one-half of the world's newspapers, two-thirds of the world's radio stations, and three-fourths of the world's motion-picture industry are only samples; none, with the sole exception of French, has met such enthusiastic acceptance from broad segments of speakers of other tongues. The structure of English is a healthy compromise between the isolating morphology of tongues like Chinese and the agglutinative tendencies of languages like Russian. The English vocabulary combines, perhaps to an even greater degree than that of Esperanto, the roots of the major tongues of civilization. "Wondrous the English language, language of live men!" asserted Samuel Johnson; and a great linguist to whom English was not native, Jakob Grimm,

declared: "In richness, good sense, and terse convenience, no other of the living language may be put beside English."

As against all this, English presents a mass of drawbacks of some of which even its own speakers are aware. Consonant combinations like those contained in "desks" and "pests," contrasting vowel phonemes like those of "hall" and "hull," "beat" and "bit," "caught" and "cut," baffle and irritate speakers of languages with simpler sound-structures. While we need not take the evaluations too seriously, it is nevertheless true that a Spanish proverb says: "Spanish is for lovers, Italian for singers, French for diplomats, German for horses, English for geese," and that immigrants asked to describe the impression made on their ears by English when they first heard it compared it to "cats meowing." The phonetic difficulties encountered by foreign learners of English are illustrated by this Spanish phonetic rendition of a well-known American song: *"Iú most remémbar dis–e kis is stil e kis –e sáig is chost e sáig,"* etc.

The very looseness and elasticity of English grammatical structure is a disadvantage in spots. In no other world-language would it be possible to get newspaper headlines so full of misleading double-talk as these: "New La Guardia Talks on Radio"; "Million in Gold Flies"; "June Tires at Peak"; "Hits Homer in Every Park"; "Algiers Has Draft Check."

What English can do to foreigners who try to use it is indicated by such phrases as *Correctly English in 100 Days* (the title of an English hand-book for Orientals); "I was suddenly disemployed" and "May I have an interview with you, facial to facial?" (two of the phrases listed therein); as well as "Soldiers are refused to eat and drink here" (sign over a Shanghai shop) and "We are boys in the age of 17 years, full from spirit of enterprise" (letter to a New York daily from Germany). The story, authentic or not, is told of an American technician employed in a Russian plant during the war who received a distressing wire from home about his only daughter: "Harriet hung for juvenile crimes"; the telegram had been translated into Russian, then retranslated into English; the original version was: "Harriet suspended for minor offenses."

In the field of vocabulary, it may be pointed out that "batter" is not only the man at bat and what you fry, but also the backward slope of a

stone wall in gardening, and what fire blight does to quince trees in horticulture. As for the attitude of the speakers of English toward their own language, G. B. Shaw says: "The English have no respect for their language, and will not teach their children to speak it."

By far the greatest drawback to the use of English on an international scale is the extraordinary spread between its spoken and its written forms. That the latter was fixed in the sixteenth century by printers who were more preoccupied with the problem of words to a line than with etymology or sound-for-symbol correspondence is an explanation, but not an extenuation. That we have gotten rid of such forms as "musick," "gheste," "strayt," "diuerse," "townge," is somewhat to our credit, but does not answer the question why we did not complete the task. The growing use of "simplified spelling" forms like "nite," "donuts" and "thru" only adds to the general bewilderment, when "tight," "dough" and "enough" remain unaltered.

Advocates of English spelling reform are legion, ranging all the way from Shaw and the late Senator Owen of Oklahoma to idealistic members of various obscure societies in all English-speaking countries. Some of them have the quaint notion that once English spelling is made phonetic the language will at once be adopted for international use, and that once this event occurs, wars will become impossible. It is hardly worth while to controvert this point of view. What is of more importance is that none of the reformed-spelling advocates has ever undertaken to answer the question of what should be done with our existing stock of books and other literature if their proposals should be adopted. Reprinting would be a monstrous task, while continuing to use present books would compel everyone to learn two written languages instead of one.

There is little doubt that in the matter of facility of spoken sounds English is outstripped by a number of languages, notably Spanish and Italian; that for grammatical structure a slightly more complex but less misleading arrangement might be desirable; and that for correspondence between sounds and spelling English is at a decided disadvantage in the face of most of its competitors.

Add to all this the charge of cultural and linguistic imperialism raised by speakers of other languages every time English is mentioned, the opposing claims of a tongue like French, which has held for cen-

turies a semi-official position as the international language of diplomacy and culture, the clamor of speakers of more recently "arrived" languages, like Spanish, Russian and Chinese, the outcry of the advocates of fully constructed "neutral" tongues, and you have a picture of the thorny way that must be trod by English before it can gain international ascendancy.

But while the controversies among national and constructed tongues were raging, a clever device was being prepared by two Englishmen, which was designed to combine the advantages of a national tongue with the desirable features of a constructed language.

Though Basic English was brought out several years before the Second World War, it did not begin to receive widespread attention until it was advocated by Churchill when the war was drawing to a close. The more recent purchase of its copyright by the British Government for £23,000, and the appearance in Basic English of a book on international peace by one of its inventors have added interest to the proposal.

Basic English represents a radical departure from other language schemes in that it offers neither an artificially constructed language nor a modified dead language, but an actual living, spoken tongue. Its inventors, C. K. Ogden and I. A. Richards, while working on a semantical treatise, *The Meaning of Meaning,* were struck by the recurrence of certain common, frequently used words in the dictionary definitions of involved and abstruse terms covering all subjects. By reducing the longer, more complicated words to their definitions in terms of the more frequently used words, they concluded that it was possible to get along with as few as 850 words in the English language. This number, at the rate of a dozen a day, could be mastered in less than three months. The well-known simplicity of English grammar, its lack of endings, the fact that English is already the most widespread language on earth, led them to suppose that with the proper reduction in vocabulary it would be easy for anyone to acquire their creation and use it as an international tongue, at least for purposes of unpretentious self-expression.

The Basic English system calls for the elimination of all but eighteen verbs ("come," "get," "give," "go," "keep," "let," "make,"

"put," "seem," "take," "be," "do," "have," "say," "see," "send," "may," "will"). These basic words, combined with other "operational" words (prepositions and adverbs like "at," "before," "by," "to"), or with nouns, can be made to replace any other verb in the English language ("keep up" for "sustain"; "take part" for "participate"; "go through" for "penetrate"; "have hope" for "hope"; etc.). Four hundred "general" nouns (such as "control," "government," "machine"); two hundred picturable objects ("apple," "island," "monkey"); one hundred and fifty adjectives ("full," "important," "ready") complete the scheme.

The process of using Basic English is primarily one of paraphrase. Without going to such extremes as defining a "beefsteak" as "a cut from the back end of a male cow kept on the fire long enough," we have such combinations as "small tree" for "bush," "without thought of others" for "selfish," "cruel government" for "tyranny." From the standpoint of logic and meaning, this is open to objection; the terms do not necessarily correspond, nor are the definitions altogether accurate.

Since Basic English has as its starting-point a living, spoken tongue, it must be viewed in two lights: 1) from the standpoint of the native speakers of that tongue, who must acquire Basic in order to communicate with foreigners; 2) from the standpoint of non-speakers of English who wish to learn it.

English speakers may object to Basic English on the ground that it is confusing and involved, as seen from the examples above; that it is restrictive and negative, since it involves a process of "learning to forget" what has been painfully acquired and learning to "do without" a wealth of words accumulated by the language's speakers over centuries of experience and toil; that it is inaccurate, with "belief" used for "devotion," "true" for "brave," etc.; and that its claims are misleading and fundamentally dishonest.

The last charge calls for clarification. Basic, in its anxiety to cut down the number of verbs to an irreducible minimum, uses words like "stop," "jump" and "rest" as nouns ("come to a stop," "take a rest"). On the other hand, it permits the addition of -ing to such words, and their combination with "to be" ("I am resting"). But all that is needed to give us the complete English verb is the addition of "rests" and "rested." English verbs are extremely simple to use; is there need of a

restrictive process whereby one can say "I am resting," "I was resting," but not "we rest," "they have rested"?

Basic also permits outside the 850-word vocabulary, the formation and use of such compounds as "without" and "undertake." But "without" is not the same as "with" plus "out," nor is "undertake" the same as "take under." Extra sets of words are allowed scientists, economists, and other specialized categories; but scientists are not the only ones to speak of "kidneys," nor economists the only ones who have occasion to use "strike," "wholesale" and "budget."

Additional to the Basic English list are measurements, numerals, currency, calendar and so-called "international terms requiring no translation." But "pound," "mile," "five," "sixteenth," "sterling," "Tuesday," "September" are certainly terms that will have to be learned, and while "beer" may be comprehensible to the German with his *Bier,* the Frenchman with his *bière,* and the Italian with his *birra,* it will not be readily understood by the Russian, who says *pivo,* the Spaniard, who uses *cerveza,* and the Portuguese, whose word is *cerveja;* in like manner, "cigarette," another of the "international" words said to require no translation, is *papirosa* to the Russian and *maki-tabako* to the Japanese.

By the time we come to the end of these special classes which are additional to the Basic list of 850 words, we find that we are closer to 8,000 than to 850; and since 8,000 words is generally a sufficient minimum for everyday expression in any language, one wonders whether it is worth while to do violence to the normal English tongue and the habits of thought and speech of its speakers. The elimination of verbs has been likened to "throwing the motor out of the car because that is where all the nuisances come from," while strong protests have been voiced over the choice of the Basic vocabulary. Why "monkey" and "sheep" and not "lion" and "wolf"? Why "heart" and not "liver"? Why "potato" and not "spinach"? Why "library" and not "bookcase"?

The normal English speaker would probably have at least as much difficulty learning to express himself in Basic as learning to use a foreign language, and the learning would be of the restrictive type, the very opposite of the expansive form of learning that the child goes through when he acquires words for concepts out of simple definitions.

The claim that the Bible is satisfactorily translated into Basic Eng-

lish is well substantiated (provided it is done by Basic experts), but it is met by the objection that the English of today has travelled far beyond the King James stage. Attempts to render into Basic the very speech in which Churchill advocated its use for international purposes resulted in an entire series of ludicrous and dismal failures.

As for the claim that Basic is a ladder to fuller English, and that the ladder can be knocked down when its purpose is achieved, it has been remarked that it would be strange indeed if foreigners, having climbed the ladder, were to be left conversing in excellent English, while the original English speakers, having corrupted themselves with Basic in order to oblige them, walked down the ladder instead of up.

From the standpoint of a foreigner, it is objected that a Frenchman who at present wants to learn to say *égoïste* in English learns "selfish," and is at once assured that his newly acquired word conveys precisely the meaning he wants. Learning Basic, he must distort, just as the English speaker must, his concept of *égoïste* into "without thought of others," which does not mean the same thing, does not fit into his thought-pattern, and involves the learning of four words, in a given sequence and context, in the place of one.

As things stand at present, a Romance speaker finds it difficult to use "get in," "get out," "get down," but easy to say "enter," "depart," "descend"; he has his choice of two locutions, one of which is close to his own mental outlook and speech-pattern. "Give up" is meaningless to him, but "abandon," "desert," "resign," "surrender" are meaningful. English has combinations of Basic verbs and prepositions that are so highly idiomatic and unique that they have to be learned as separate word-groups: "look out," for example, will be taken in its literal sense, "to look outside," but not in its more customary idiomatic meaning of "to be careful"; "go on" means "continue," but not literally; "get," by itself or in combination, is probably the most idiomatic and untranslatable expression in any language; "obtain," in any of a dozen fashions, "be obliged to," "cause to be," "induce," "become," "arrive," "procure," are only a few of its multifarious meanings. Yet it is one of the eighteen verbal mainstays of Basic.

English spelling is by far the worst, the most inconsistent of all spellings on earth. In the course of the 850-word Basic list we find letters and combinations of letters having from two to ten different

sound-values. Other defects of English are its uncertain syllabification and unpredictable stress. No attempt is made by the inventors of Basic to repair these fundamental defects of English.

Foreign reactions to the Basic English movement are varied and interesting. There is no use denying that the overwhelming majority of Basic enthusiasts are English speakers, who view Basic as a means of spreading their own language and as a salvation from the necessity of learning other tongues. The results achieved by Basic English where it has been taught to foreigners are doubtful, if we make due allowance for the customary extravagant success claims of partisans and teachers with an ax to grind. Foreigners who favor Basic English are for the most part those who already know English. To what extent their support is due to non-linguistic considerations is an open question.

Representatives of the governments of the minor United Nations declared against Basic when it was proposed as an international tongue. Foreign writers oppose it, either seriously, as an instrument of racial and economic imperialism, or jocularly, as a movement designed to debase the most important of existing world languages and to create a "black market in verbs and adjectives." On the other hand, some foreign linguists have taken it seriously to the extent of trying to duplicate it in their own tongues. Basic Spanish, Russian and Chinese have been offered as world languages. It is obvious that if English cannot succeed in Basic form, neither can they, with their greater grammatical complexities, difficulties of sounds and tones, and vocabularies which are far less international in origin and scope.

It *Can* Be Done!

A world language is more important for mankind at the present moment than any conceivable advance in television or telephony.—
Lewis Mumford

After all that has been said before, the careful weighing of evidence for and against natural, modified and constructed languages, it will seem strange that we suddenly reverse our approach and advocate a method that smacks of procedural anarchy. Yet that is precisely the position one is forced to take when faced with the labors and bickerings of the interlinguists, who are so laboriously trying to evolve a language for international use. This attitude springs from the fact that both labors and bickerings are predicated upon two fundamental linguistic errors, one of which follows logically from the other.

Interlinguists, including advocates of natural languages, apostles of modified modern tongues like Basic English, and constructors of purely artificial tongues, lose sight of the fundamental fact that every language, however intricate it may seem to those who try to learn it as adults, is simple to its own native speakers, who have learned it from childhood by natural speaking processes. As a result of this oversight, they proceed to plan not, as they should, for the future generations, but for the existing adult speakers who will for the most part disappear within the next fifty years. They ignore the fact that the people now alive will be completely replaced, within less than a century, by other people whose habits, linguistic and otherwise, are not yet formed because the people are not yet born, and who can be given, with proper planning, any set of linguistic or other habits that it pleases their enlightened elders to impart to them.

This simply means that there is no rhyme or reason to the contro-

versies now bitterly raging as to whether it would be better to use a natural, a modified, or a constructed language as an international medium of communication. Esperanto, Interglossa, Basic English, natural English, French, Chinese—it makes no difference which one is selected, provided all people now living agree to use it, not primarily for themselves, but for their descendants. What is needed for the solution of the world's language problem is simply *a* language, any one of the world's 2,796 natural languages or of the five hundred or so constructed ones that have at various times been proposed; with, however, two qualifications: the language selected must have absolute correspondence of written symbols for spoken sounds, and it must be adopted, by international agreement, in all countries at the same time, not in the high schools or colleges or universities, but in the lowest grade of the elementary schools, side by side with the national tongue, so that it may be learned easily, naturally and painlessly by the oncoming generations.

Let us consider for a moment the logic of these propositions. There is no linguistic expert on earth who will deny that all *spoken* languages are essentially "easy" to their own speakers. Chinese, Russian, American and Zulu children speak their own tongues with approximately the same ease and fluency up to the time their schooling starts. It is when the speaking process turns into a conscious learning of grammatical rules and, worse yet, when it becomes a conscious tie-up of spoken with written forms that the difficulties begin; and these are greater (sometimes immeasurably greater) in one language than in another. If this is granted then it follows that any *spoken* tongue, natural, constructed or modified, may be adopted with equal chance of success to be imparted by natural speaking processes to all the world's children as soon as they become old enough to go to school. We need not worry about the fact that they will previously have learned, in part, their own national tongues. The experience of bilingual countries like Belgium, Switzerland, Canada and South Africa shows us that one language can be started at birth, another at six, and both come out equally well. And it does not matter what the languages are: "easy" or "difficult," "inflected," "isolating," "agglutinative" or "polysynthetic." All these terms represent conscious processes of language-acquisition after linguistic habits are fully formed: that is, when we try to learn languages at the rate of three hours a week in high school or college,

by the grammar-method, which is simply comparing the language we are learning with the one we already possess.

On the other hand, the written form of the language we are acquiring has a great deal to do with true "ease" and "difficulty." In Spanish and Italian, where there are few exceptions to the sound-for-symbol correspondence, the process of learning to read and write and spell is a quick one. In the case of French and English, where there is strong divergence between spoken and written form, learning to read is much more complicated. In Chinese and Japanese, where complete spoken words are represented by arbitrary symbols, the process is still more involved. Consequently, the language adopted for international purposes must be written absolutely phonetically, which means that existing national languages, if they wish to present their candidacy for the post of international tongue, must be prepared to reduce their spelling to a system of absolute phonetic correspondence, at least for international use.

Outside of this, the problem rests not with the world's linguists, but with the world's governments. Do they want an international tongue for international, and possibly even national use, which will permit any inhabitant of the world to move about from country to country without ever encountering a language difficulty, since all the people of all the countries he visits will speak, in addition to their own national languages for home use, the international language which he himself has learned to speak since he first began going to school? If they do, the remedy for the world's linguistic troubles lies in their own hands.

As we have seen, some five hundred international tongues have been evolved and proposed since the seventeenth century. In all of them, one outstanding preoccupation is evident: to make things as "easy" or as "logical" as possible for the greatest possible number of learners of the *existing* generation. Since the existing generation speaks a vast number of widely diverging languages, this preoccupation is doomed to sterility in advance. The Spanish, Portuguese or Italian speaker who likes Esperanto's largely Romance vocabulary is still baffled by features that run counter to his habits. The French speaker who tries to use Basic English must give up words which to him are perfectly accessible and meaningful and learn compounds which are idi-

omatic, while the native English speaker finds himself beset at every turn by restrictions more galling than those set up by OPA. The western scientist who tries to use Interglossa resents the Chinese syntax, while the Chinese scholar resents the Graeco-Latin vocabulary.

The real point, lost by all the interlinguists, is that the interlanguage of the future is for the future, not for the present generations; and that it does not have to be made "easy" or "logical" for anybody in particular, provided it is imparted in the right way at the right age.

Either the world's governments are interested in giving the world's future generations the means of mutual understanding, or they are not. If the latter, nothing more need be said. The Tower of Babel, like its counterpart of Pisa, will continue to topple along for centuries as it has done in the past. People who want to travel or communicate in any way with other nationals will painfully learn foreign languages at the adult stage, or get themselves interpreters, translators and guides.

If the governments are interested, the solution is simple. A commission of international linguists can be set up for the purpose of selecting one language from the world's many natural and artificial ones to serve as an interlanguage. Which one they select is of comparatively little moment provided they do select it. Once it is selected, it goes into all the elementary schools in the world at the same time to be imparted (not "taught" as a foreign language) by natural methods, from kindergarten on, side by side with the national tongue and on an absolute parity with it. Within ten years, a new generation of interlinguists will crop up all over the world; within twenty, it will have grown to maturity; within thirty or forty, it will be ready to take its place at the helm of the world's affairs; within fifty or sixty, at least in civilized countries, the person that is not equipped with the interlanguage will be as rare as the illiterate is today.

The present generation? Let it do what it wants. It will be dead within a century anyway. Those who want to keep up with the times can take up the new interlanguage in special classes, and acquire it painfully, the hard way, as they acquire foreign tongues today. Those who are too lazy, or haven't the time, or don't believe in the idea, can be left completely undisturbed. The world's linguistic picture will not change overnight, and by the time it does most of them will be enjoying their eternal reward. Is it callous to treat the present generation

with so little regard? Certainly no more so than when we ask it to lay down life, liberty and comfort in order that future generations may be assured of certain advantages, political or economic, which those same future generations may not view as advantages at all.

Is all this too simple to be true? Perhaps so; it is the same kind of simplicity as that which would put an end to all wars by the expedient of complete disarmament on the part of all nations, save for ordinary police forces, armed with clubs, revolvers, machine-guns at the most, in all sovereign countries, and one international police force endowed with a few military planes, a few cruisers, and a few pieces of field artillery.

And yet perhaps it is not so simple. In the first place, the will to universal international understanding must be there, just as the will to peace must be there in the matter of disarmament. This means international government action—a concerted move on the part of all governments to make possible what is desirable. One government (possibly our own) may initiate the movement. It remains to be seen whether the others are willing to cooperate in the interests of those "children and children's children" concerning whom so many beautiful words flow, but for whom so little is ever really done by any existing generation.

Secondly, there is the problem of the linguistic commission. Were all the governments to agree in advance to abide by the decision of the commission, the commission itself would have to be carefully picked and even more carefully watched. The number of delegates from each country would have to be determined in advance, and it should be determined not by population figures, but by literacy figures. There is no reason why a country like China, with a population three times that of the United States, but educational facilities that are only a fraction of ours, should exert a predominant influence in such a group, all the more since the immediate results of the commission's decision would in reality apply only to that portion of any country's population which has the possibility of schooling. (The principle of basing representation in international congresses on literacy rather than on population opens up interesting vistas, since it would encourage national governments to develop literacy within their borders; it might even be profitably ap-

plied to our own nation, where presidential conventions and elections go by States.)

Thirdly, the selection of representatives by the various governments is of some importance. Known advocates of one or another of the systems now vying for supremacy should *a priori* be excluded. The qualifications of every delegate should be passed upon by the body as a whole.

But even more important is the question of time and procedure. Left to their own devices, linguists might bicker on forever, and since what language they select is not one-tenth so important as their selecting it, a definite time limit should be imposed on their labors. While all languages, national, modified and constructed, could be presented for candidacy at the outset, the procedure should involve a series of compulsory run-off elections, with weaker candidates gradually weeded out until an absolute majority for one tongue is reached. Lastly, it should be understood that the language selected, if a natural tongue, would immediately be given a phonetic spelling for international purposes. The charge of cultural imperialism against any national tongue that might be selected would be countered by two facts: the choice would have been made by an international commission, in which all nations would be fully represented on the basis of their literate populations; and its spelling would be changed to conform with phonetic requirements, thereby differentiating it, in written form, from the national tongue.

The process of training teachers in the international tongue would take a little time, but with educational facilities, teachers' colleges and normal schools what they are today, it might be hoped that the actual process of imparting the international tongue in the kindergartens could begin within two or three years of the commission's decision. As the first batch of children moves on to higher grades from year to year, more and better trained teachers would also become available.

Whether an international tongue will end wars is, of course, problematical. It might have to be coupled with some additional international reforms, such as the universal disarmament suggested above. There is little question, however, that it would make future wars a little more comfortable to their participants.

Will the rise of an interlanguage ultimately do away with existing

national languages? All who are trying at present to sell us a particular interlanguage scheme assure us that it will not, that it is meant "only" for international communications, with the existing languages surviving and flourishing. My answer is that it assuredly will in the long run, though the long run may easily turn out to be a few centuries. In economics, bad money drives good money out of circulation, because everybody wants to hoard good money for future use. In languages, the opposite is true, because languages are for immediate, not future use. The language that is good at all times and in all places will eventually supplant languages whose currency is limited to their own territory. The process will, of course, be gradual, but we may expect that the present spoken languages will, in due course of time, tend to become cultural relics, like Latin, until they are ultimately studied not for practical use, but solely for literary values. But this would not be a calamity. Crystallization would enhance the cultural values of the existing national tongues by preventing what some regard as their further debasement, while the march of world culture would continue under the unfurled banner of a common tongue.

What are the chances that the new interlanguage will dialectalize, just as the Latin of the Roman Empire broke up into the various Romance tongues? Under present conditions of communications and education, they are exceedingly slim. The Roman Empire's means of communication and education (roads, trade, military service, books, schools) were primitive as compared with those of today; yet while those rudimentary means endured, the language remained substantially one. It was only when communications failed after the Empire's downfall and each community became an isolated, self-contained unit that incomprehensibility arose. Our comparison, under modern conditions, should be with the Anglo-American of the English-speaking world rather than with the Latin of the Empire. The King's English and the American Language, which had been diverging more and more down to the turn of the century, began to grow together again with the advent of the radio and the talkies. These two inventions, by bringing the pronunciation and intonation of one set of speakers to the other, caused each one insensibly to modify its own habits of speech in the direction of the other's. In the world of tomorrow there will be much more international travel than in the past, but even the obdurate

stay-at-homes will get standardized interlanguage radio, television and movie programs.

This being so, there is little doubt that the interlanguage will spread with relative rapidity, and as it spreads crowd out the world's spoken vernaculars. Were the plan we outline to be initiated in the 1950's, the universal tongue would be a living, powerful reality by A.D. 2050.

The story of language has carried us far afield, through the domains of history, of physical science, of anthropology, sociology and geography.

We have witnessed the birth and growth of human systems of communication, chief among which is language. The nature of speech and writing are no longer closed books to us. The fundamental purpose and function of speech has become clear. We have seen what language and languages consist of. We have observed the intimate connection of language with all basic human activities. We now know enough about the location, affiliations, cultural and economic importance of the world's chief tongues to be able to discuss them intelligently. Even their appearance and structure are no longer mysteries.

The number of existing languages, and the difficulty of mastering even a single one beside our own have been brought into sharp focus. The problems of language learning are not something for the pedagogues alone to worry about. They concern each and every one of us, if not in connection with foreign tongues with which we may at any time be thrown in contact, then at least in conjunction with our own mother-tongue, over which none of us exercises absolute mastery.

But the question of language learning, even if we were to find a perfect solution for it, would nevertheless leave the issue of understanding in the balance. We can learn, with great effort, one or more foreign tongues in addition to our own, and then be left gaping at the hundreds of other languages for which there is no understanding. No human life-span is long enough to enable us to gain reasonable control of more than a very few out of the very many. Faced with the speaker of a tongue he has not studied, the linguist and polyglot can be as completely baffled as the man who speaks only his native tongue.

Of what avail to learn to speak perfect French, and then have to go to China, or perfect Spanish for a future work that takes you to Russia?

This is a question that often rises to trouble advocates of foreign language learning, and it is one for which they have no answer.

There is, however, one (and only one) answer. The world, having reached its present state of material development, broad interchange of products and ideas, and ease of material communications, needs an international language as it needs nothing else, unless it be the will to peace.

Pessimists point to the infinite difficulties that strew the path of a language for the world. These difficulties, they claim, are on a par with those besetting the way to world peace and its concomitant harmony, prosperity and progress. Nationalism, prejudice, superstition, unreasoning hatreds, the dead hand of tradition are like cocked pistols, pointed at the hearts of those who seek a brighter, better world. The pessimists shake their heads and say, "You cannot overcome human nature! It is human nature that decrees that there shall forever be linguistic differences and difficulties, hatred and intolerance and war! You are idle dreamers! Forget your dreams! Resign yourselves to human nature and to human fate!"

Perhaps they are right. But the world's past progress, spiritual and material, has never been achieved by the doubters, by those supinely willing to submit to the pessimistic conception of human nature and human destiny.

Human nature has its bright as well as its dark side. Human nature displays in abundance heroic courage, boundless self-sacrifice, love of one's neighbor, intelligent willingness to cooperate, as well as the purely negative qualities described above. And human destiny has largely been in the past, and will be in the future, what human beings make it.

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